

PSYCHOLOGICAL ABSTRACTS

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GENERAL (incl. Statistics)

4084. [Anon.] Harold E. Burt. *J. consult. Psychol.*, 1941, 5, 145.—Portrait.

4085. Blanshard, B. The nature of mind. *J. Phil.*, 1941, 38, 207-215.

4086. Boring, E. G. Statistical frequencies as dynamic equilibria. *Psychol. Rev.*, 1941, 48, 279-300.—A plea for clearer understanding of the implications and use of statistical methods in physics and social sciences is made, specifically, a demand for more determinism in statistics, for a causal interpretation of probabilities in science, and an unwillingness to resort to indeterminacy except when determinacy is known to be, for the time being, impossible. (1) "The Principle of Indifference, when it is used to predict frequencies in the absence of observation, is only ignorance masquerading as knowledge." (2) "The Principle of Independence . . . can exist, if the series converges upon a given frequency, only if the number of cases is indeterminate or infinite, and . . . the number of cases in the law of large numbers must be finite and determinate if the statistical model is to be of scientific use, since a model must have definite dimensions." Hence, the investigator must discover the nature of the interaction among the events causing the series to converge. (3) 7 classical instances of actual supposed convergence are discussed, and all imply the existence of interaction among the events. Indication is given of the general nature of the equilibrating forces which would make the events tend toward a limiting frequency.—A. G. Bills (Cincinnati).

4087. Casanova, T. Analysis of the effect upon the reliability coefficient of changes in variables involved in the estimation of test reliability. *J. exp. Educ.*, 1941, 9, 219-228.—The analysis is carried out under the following headings: (1) The variance of the halves in the split-half method. (2) The correction for guessing. (3) The effect of calling zero all negative scores.—H. W. Karn (Pittsburgh).

4088. Ferraz Alvim, J. Qual o valor psicológico da afirmação de Descartes a alma e mas fácil de se conhecer do que o corpo? (What is the psychological value of Descartes' assertion that the mind is easier to know than the body?) *Rev. Neurol. Psiquiat. S. Paulo*, 1941, 7, 65-66.—This assertion has no contemporary value. The great error of purely rationalistic or idealistic schools (Descartes, Kant, Hegel, Fichte) is the use of the *a priori* method and formulation of abstract laws. The experimental method, relying wholly on sensory

experience, is equally one-sided. The inductive method, followed by deduction, as practiced by Aristotle and Thomas Aquinas, leads to integral reality and the concept of psychophysical unity.—M. E. Morse (Baltimore, Md.).

4089. Garcia-Mata, C. A practical method of smoothing statistical curves by hand. *Bull. Pan-Amer. Un.*, 1941, 75, No. 5, 276-281.—A simple, non-mathematical, and accurate procedure for smoothing statistical curves is presented; it is especially applicable to curves based on data containing a considerable margin of error.—J. E. Zerga (U. S. Social Security Board).

4090. Heider, F. The description of the psychological environment in the work of Marcel Proust. *Character & Pers.*, 1941, 9, 295-314.—Proust, like other novelists, is a good psychologist in that he knows human nature. He invades territory beyond the borderline of normality, describes the hidden motives of man, and gives other evidence of psychological insight interwoven into his stories. However, he is unique in his treatment of the subjective environment. He seeks to determine how man perceives reality and how his subjective impressions differ from the objective world laid out in measurable time and space. Depending upon the psychological variable under consideration, his psychological approach conforms to the developmental psychology of Piaget, Werner, and others, the *Gestalt* psychology of Koffka, the stream-of-consciousness concept of James and Bergson, and the topological descriptions of Lewin. The bibliography includes 7 references in addition to a list of works by Proust.—M. O. Wilson (Oklahoma).

4091. Jolliffe, E. T. Fundamental principles in tabulating machine methods of statistical analysis. *J. exp. Educ.*, 1941, 9, 254-284.—The report aims to help the research worker understand some of the basic problems involved in tabulating machine analysis in statistical work. The tabulating card, coding, the key punch, the alphabetical punch, the verifier, the comparing reproducer, the sorting machine, the card counter, and the tabulator are discussed. Illustrative problems for different types of research projects adaptable to machine analysis are presented.—H. W. Karn (Pittsburgh).

4092. Lowe, V. William James and Whitehead's doctrine of prehensions. *J. Phil.*, 1941, 38, 113-126.—A central point in Whitehead's philosophy is the notion of "the transmission of feelings," that a past experience may grow into a present one and compel some conformation to it. James also "described the moment of experience as inheriting and appropriating the contents of prior experiences." James had much faith in his hypothesis of felt-

transition (immediate temporal relation), but it remained for Whitehead to develop it along general lines in his theory of prehensions. The rest of this paper is devoted to a discussion of the implications of and arguments concerning this doctrine.—C. N. Cofer (George Washington).

4093. Meyer, A. Paul Ferdinand Schilder, 1886-1940. *J. nerv. ment. Dis.*, 1941, 93, 812-814.—Obituary.—M. Keller (Butler Hospital).

4094. Oberndorf, C. P. Oliver Wendell Holmes—a precursor of Freud. *J. nerv. ment. Dis.*, 1941, 93, 759-764.—Abstract and discussion.

4095. Peugnet, H. B. An improved gas burner for smoking kymograph paper. *Science*, 1941, 93, 625-626.—The author gives constructional details and directions for use of a kymograph paper smoking device, which gives a smooth coating and reduces the possibility of scorching the paper.—F. A. Mote, Jr. (Connecticut).

4096. Pillsbury, W. B. Edouard Claparède, 1873-1940. *Psychol. Rev.*, 1941, 48, 271-278.—Among Claparède's chief contributions were the founding and editorship of the *Archives de Psychologie*, the founding of the Institute J. J. Rousseau following the publication of his *Psychologie de l'enfant*, and his guidance of the International Congress of Psychology of which he was permanent secretary for many years. His theoretical psychological system was functional, agreeing with the Chicago school in recognizing the role of mind in controlling adaptation. His recent work of most general interest was his study of reasoning through formation of hypotheses and by the method of 'spoken reflection' or thinking aloud by the observer during problem solving. His influence on psychology was considerable.—A. G. Bills (Cincinnati).

4097. Scates, D. E. Correlation coefficients and other constants for combined and separated distributions. *J. exp. Educ.*, 1941, 9, 275-284.—"The correlation coefficients, standard deviations, and means may be obtained for combined or separated populations by adding together (or subtracting) the moment summations, for the several constituent groups, which are ordinarily obtained for individual correlations: $\Sigma x'y'$ or $\Sigma(x'-y')^2$, $\Sigma x'^2$, $\Sigma y'^2$, $\Sigma x'$, $\Sigma y'$, and N . After such combination (or subtraction) of the summations the results are substituted in the usual formula for calculating r from arbitrary working origins,—or in the appropriate formulas for the standard deviations or means. The procedure is not restricted to any particular correlation formula, nor to distributions which have been tabulated in two-way tables. It is somewhat more facile, when the necessary data are available, than are combining formulas which utilize directly r , σ , and M from each distribution. If the working origins and class intervals are not the same for the tabulations of the several constituent populations, adjustments may be made for these differences."—H. W. Karn (Pittsburgh).

4098. Sheldon, W. H. On the nature of mind. *J. Phil.*, 1941, 38, 197-206.

4099. Siwek, P. *Psychologia metaphysica*. (Metaphysical psychology.) Rome: Pontificia Universitas Gregoriana, Institutiones Philosophiae Aristotelico-Scholasticae, 1939. Pp. 546.—(*Philos. Abstr.*, 1940, No. 2, 22.)

4100. Sloane, V. [Ed.] *American Journal of Orthopsychiatry. Decennial index, Volumes 1-10, 1930-1940*. New York: American Orthopsychiatric Ass., 1941. Pp. 74. \$1.00.—The index is presented in four parts: table of contents, index of authors, subject index, and index for book reviews.—H. L. Ansbacher (Brown).

4101. Thomson, G. H. The use of the Latin square in designing educational experiments. *Brit. J. educ. Psychol.*, 1941, 11, 135-137.—This is an illustration of the application of the device, first employed in agricultural experiments and permitting a convenient analysis of variance, to the problem of evaluating 4 different methods of testing spelling ability.—R. C. Strassburger (St. Joseph's College for Women).

4102. Yûki, K. [Standard psychological terms (audition). I.] *Jap. J. Psychol.*, 1941, 16, 70-79.—Japanese psychological terms of audition are listed with English and German equivalents.—R. Kuroda (Keijo).

[See also abstract 4399.]

NERVOUS SYSTEM

4103. Carrillo, R. Introducción al estudio del electroencefalograma. (Introduction to the study of the electroencephalogram.) *Index Neurol. Psiquiat.*, B. Aires, 1941, 2, 179-191.—This is an outline of the subject under the headings: historical introduction; technical points; characteristics of the normal EEG and theories of the origins of the different waves; reading and classification of EEG's; and modifications in various pathological conditions.—M. E. Morse (Baltimore, Md.).

4104. Cole, K. S., & Baker, R. F. Transverse impedance of the squid giant axon during current flow. *J. gen. Physiol.*, 1941, 24, 535-549.—The change in transverse impedance of the squid giant axon due to direct current flow was measured over a frequency range of 1-500 kc./sec. The impedance change upon polarization was interpreted as a change in membrane conductance: at the cathode, an increase to a maximum value approximating that during activity; and at the anode, a decrease nearly to zero. Assuming that the conductance of a membrane is proportional to its ion permeability, the data indicated increased permeability at the cathode and decreased permeability at the anode. There was no evidence of a significant change in membrane capacity, and the membrane appeared to act as rectifier.—D. K. Spelt (Mississippi).

4105. Cole, K. S., & Curtis, H. J. Membrane potential of the squid giant axon during current flow. *J. gen. Physiol.*, 1941, 24, 557-563.—Using the squid giant axon, the potential difference across the membrane was measured, during the application of

polarizing currents, between an inside capillary electrode with its tip in the fiber, and an outside electrode flush with the surface of one polarizing electrode. The rise of potential was approximately exponential at the anode; at the cathode some oscillation was apparent with subthreshold values, and the action potential arose from the first maximum when currents exceeding the rheobase were used. "On the assumption that the membrane conductance is a measure of its permeability, these experiments show an increase of ion permeability under the cathode and a decrease under the anode."—D. K. Spelt (Mississippi).

4106. Connor, G. J. Functional localization within the anterior cerebellum. *Proc. Soc. exp. Biol.*, N. Y., 1941, 47, 205-207.—Ablation studies in the dog, cat, and monkey reveal a functional type of localization within the anterior cerebellar lobe. This localization is so precise that functional units in single extremities, the neck, and the labyrinths are discretely represented in isolated anterior cerebellar subdivisions.—H. Peak (Randolph-Macon).

4107. Freeman, W., & Watts, J. W. The frontal lobes and consciousness of self. *Psychosom. Med.*, 1941, 3, 111-119.—Case illustrations support the contention that prefrontal lobotomy reduces the affective component of the personality of patients suffering from a distressing and unyielding consciousness of the self. Details of the operation and a description of post-operative behavior are given.—P. S. de Q. Cabot (Simmons).

4108. Lashley, K. S. Coalescence of neurology and psychology. *Proc. Amer. phil. Soc.*, 1941, 84, 461-470.—Characteristics of the mental "can be stated meaningfully only as a structure or organization of elements . . . which are . . . purely conceptual." We need not look "for a special form of energy or of chemical action correlating with mind, but only to look for correspondences of organization in physiological and mental processes." Several points of convergence of psychological and neurological analysis are reviewed: (1) concerning perception and neural organization; (2) concerning motivation; and (3) concerning intellectual organization.—C. N. Cofer (George Washington).

4109. Sarkisov, S. A., & Livanov, M. N. [Characteristics of Berger's rhythm in normal and pathological states.] *Nevropat. Psikhiat.*, 1941, 10, No. 3, 28-35.

4110. Walter, W. G., Golla, F. L., et al. Electrically induced convulsions. *Lancet*, 1940, 238, 127-128.—The technique and the effects of electrically induced convulsions are described. "There seem to be two groups of patients, one with high and one with low resistance. . . . The first effect is a lowering of electrical resistance. In a patient with high resistance it is lowered by about 50 percent and is recovered slowly; in a patient with low resistance it is lowered very little and is recovered in a few minutes. If the first shock fails to produce a major fit, a second may, for it will have a greater effect.

The shock is followed by a long latent period, especially if only just sufficiently intense. The electromyogram is much the same as those of spontaneous and cardiazol fits. The electroencephalogram shows the repetition of a small rise and a sudden breakdown followed by a number of oscillations. The shape is remarkably stereotyped."—C. K. Trueblood (Cambridge, Mass.).

[See also abstracts 4115, 4128, 4170, 4173, 4182, 4186, 4192, 4234, 4244, 4249, 4256, 4259, 4354.]

RECEPTIVE AND PERCEPTUAL PROCESSES

4111. Amaniev, B. G. [Individual variations of sensibility.] *Nevropat. Psikhiat.*, 1941, 10, No. 3, 49-53.

4112. Bartley, S. H. Vision, a study of its basis. New York: Van Nostrand, 1941. Pp. xv + 350. \$3.50.—This is an exposition of the literature of vision with emphasis on its neurophysiology. Each topic treated is followed by an extensive bibliography, which stresses recent developments in the field. The subject matter is arranged under the headings: introduction; forms of brightness discrimination; entopic stray light; sense-cells and the retina; the blind spot; repeated stimulation; flicker; perception of movement; adaptation phenomena; neural interaction; contour; the electroretinogram; the optic-nerve discharge; the cortical response; and conclusion. The author indicates the relevance of field-theory to some of the problems.—C. H. Graham (Brown).

4113. Bouman, H. D. Experiments on short tones. *J. acoust. Soc. Amer.*, 1941, 13, 84.—Abstract.

4114. Burnham, R. W. A note concerning Hartmann's studies of intersensory effects. *J. exp. Psychol.*, 1941, 29, 81-84.—This study comprises essentially an analysis of the data upon which Hartmann (see VII: 4277; 4278) based his argument for intersensory facilitation. The critical ratios in that work are found in a number of cases to fall notably below the criterion of 3.00 conventionally accepted for significance.—M. J. Zigler (Wellesley).

4115. Coakley, J. D. Synchronization in the higher auditory pathways. *J. acoust. Soc. Amer.*, 1941, 13, 84.—Abstract.

4116. Crozier, W. J., & Wolf, E. Theory and measurement of visual mechanisms. IV. Critical intensities for visual flicker, monocular and binocular. *J. gen. Physiol.*, 1941, 24, 505-534.—Using 2 experienced S's, the critical intensity for recognition of visual flicker at a given flash frequency was determined for each eye separately and for both eyes, with frequencies of 2-80/sec. The stimulus size was sufficient to insure an extra-foveal rod set of data. Systematic differences between monocular and binocular data were such that the latter could not be described as intermediate between the former for a given S. Analysis of the data indicated that: (1) the curve representing predominantly rod functions results from a complex integrative process in

which certain rod effects are inhibited by cone effects, while the remaining rod effects summate with cone effects; (2) the normal probability summation adequately describes both monocular and binocular data under widely varying experimental conditions; (3) in binocular recognition of flicker a summation of simultaneous, symmetrical unocular excitation occurs. The implications of the results are discussed.—*D. K. Spelt (Mississippi)*.

4117. Crozier, W. J., & Wolf, E. The simplex flicker threshold contour for the zebra finch. *J. gen. Physiol.*, 1941, 24, 625-633.—The Australian zebra finch is a diurnal bird with a purely cone retina. The flicker response contour was determined for 4 males, using equal light and dark times. The resulting curve (log critical intensity vs. flash frequency) was a normal probability integral, free from special effects. The relation of such curves to certain points of photochemical visual theory is discussed.—*D. K. Spelt (Mississippi)*.

4118. Crozier, W. J., & Wolf, E. Theory and measurement of visual mechanisms. V. Flash duration and critical intensity for response to flicker. *J. gen. Physiol.*, 1941, 24, 635-654.—The flicker response curve was determined for a human subject at each of 5 values of the light-time fraction: 0.10, 0.25, 0.50, 0.75, 0.90. As the light-time decreased, the curve was moved toward lower flash intensities and rose to higher maximum levels. The high intensity segments could be fitted by normal probability integrals. The low intensity segments were complicated by summation with the lower ends of the high intensity curves, such that partial suppression of low intensity effects occurred. The data are interpreted as consistent with a theory of central, rather than peripheral, government of flicker discrimination.—*D. K. Spelt (Mississippi)*.

4119. Dunbar, C. Visual efficiency in coloured light. *Trans. Illum. Engng Soc. Lond.*, 1939, 4, 137-151.—(*Sci. Abstr.*, B, XLIII: 145).

4120. Fischer, F., & Gudden, B. Die Augenempfindlichkeit im Ultrarot. (Sensitivity of the eye in infrared.) *S. B. phys.-med. Soc. Erlangen*, 1939, 70, 378-384.—[Abstracted review; original not seen.] Some previous threshold determinations are reported and compared with the investigations of Goodeve (see X: 3303). They agree that a wave length of 0.9μ can still be perceived, but disagree regarding the spectral trend of the sensitivity curve and the absolute threshold of the longest waves.—*H. L. Ansbacher (Brown)*.

4121. Hardy, L. H. Measurement of sight. *Illum. Engng. N. Y.*, 1940, 35, 605-624.—(*Sci. Abstr.*, A, XLIII: 3167).

4122. Hecht, S., Shlaer, S., & Pirenne, M. H. Energy at the threshold of vision. *Science*, 1941, 93, 585-587.—This experiment was designed to determine the minimal visible radiant energy necessary to evoke a visual response. The dark adapted eye was stimulated 50 times by brief flashes, and the subject reported whether he saw the flashes or not.

Without the subject's knowledge, the experimenter varied the intensity of the flashes in random order. The values of the flashes in absolute radiant energy units (after making corrections for ocular absorption etc.) were known. The amount of energy necessary to elicit a response was computed to be about 5 to 14 quanta, absorbed by an area containing approximately 500 retinal cells. "The likelihood, therefore, that 2 quanta will be taken up by a single rod cell is only about 4 per cent. We can then conclude that in order to see, it is necessary for only 1 quantum of light to be absorbed by each of 5 to 14 retinal rods. Taking a quantum efficiency of 1 for visual purple, this means that one molecule of visual purple needs to be changed in each of 5 to 14 rods in order to produce a visual effect." The experimental results show that from 5 to 7 quanta are required.—*F. A. Mote, Jr. (Connecticut)*.

4123. Jaggi, M. Beitrag zur Kenntnis der spektralen Hellempfindlichkeit des menschlichen Auges auf Grund flimmerphotometrischer Messungen. (Contribution to the knowledge of spectral brightness sensitivity of the human eye based on flicker-photometric measurements.) *Helv. phys. Acta*, 1939, 12, 77-108.

4124. Kemp, E. H., & Johnson, P. Localization of response in the cochlea as determined by electrical recording. *J. acoust. Soc. Amer.*, 1941, 13, 87.—Abstract.

4125. Kühl, A. Entwurf einer Theorie des Lichtsinns. (Outline of a theory of the light sense.) *Zeiss Nachr.*, 1936, Sonderheft. Pp. 31.—[Abstracted review; original not seen.] This is a non-technical version of the author's theory (see XV: 4126). Clarification of the experimental foundations and practical deductions are emphasized.—*H. L. Ansbacher (Brown)*.

4126. Kühl, A. Theorie des Lichtsinns; Theorie der tonfreien Helligkeits- und Farbempfindung. (Theory of the light sense; theory of achromatic brightness and color sensation.) *Z. Instrum. Kde.*, 1938, 58, 469-492.—[Abstracted review; original not seen.] The author presents his theory in 19 propositions of which the first 5 are physiologic-optical and the rest contain the perceptual theory proper including some applications. As a result the physiological variables of brightness (subjective brightness sensation) and achromatic color of a test field are regarded as functions of 3 physical variables: diameter and luminosity of the test field and luminosity of the surrounds. Under certain stated conditions 1714 brightness differences can be distinguished between the absolute threshold and blinding. The theory is a contribution to the reconciliation of the Young-Helmholtz with the Hering theory. Some of the topics treated in the various propositions are: (2) limits of Fechner's law; (4) extension of Ricco's and Piper's theorem beyond threshold values; (14) the most suitable illumination of the surrounds; (19) interpretation of the curve of dependency of visual acuity upon illumination.—*H. L. Ansbacher (Brown)*.

4127. Lewis, D. Pitch and the missing fundamental. *J. acoust. Soc. Amer.*, 1941, 13, 84.—Abstract.
4128. Lowy, K. Electrical response of the auditory nerve to different sound intensities under pathological conditions. *J. acoust. Soc. Amer.*, 1941, 13, 83-84.—Abstract.
4129. Luckiesh, M., & Moss, F. K. Summary of researches involving blink-rate as a criterion of ease of seeing. *Illum. Engng, N. Y.*, 1940, 35, 19-32.
4130. Luckiesh, M., & Moss, F. K. Effects of illumination on reading efficiency. *Illum. Engng, N. Y.*, 1940, 35, 703-707.
4131. Luckiesh, M., & Moss, F. K. The visibility of print on various qualities of paper. *J. appl. Psychol.*, 1941, 25, 152-158.—When quality of printing is optimum, the differences in the visibility of various grades and finishes of white papers are very small.—E. E. Ghiselli (California).
4132. Luckiesh, M., & Moss, F. K. Brightness contrasts in seeing. *Trans. Illum. Engng Soc. N. Y.*, 1939, 34, 571-597.—(*Sci. Abstr.*, B, XLII: 1987).
4133. Masaki, M. [On the afterimage of movement. IV.] *Jap. J. Psychol.*, 1941, 16, 40-44.—(See also XV: 2924).—R. Kuroda (Keijo).
4134. Morinaga, S. [Some considerations on the Müller-Lyer figure.] *Jap. J. Psychol.*, 1941, 16, 26-39.—Several explanations of the Müller-Lyer illusion are proposed. The lines pointing toward each other pull each other, but the conditions of the pull need to be made clear.—R. Kuroda (Keijo).
4135. Paynter, H., & Flekser, N. Satisfactory intensities of illumination from a consideration of visual performance under different types and intensities of lighting. *Trans. S. Afr. Inst. elect. Engrs*, 1939, 30, 169-183.
4136. Pistor, W. Die Bedeutung des stereoskopischen Bildwurfes beim Film. (The significance of stereoscopic projection in film.) *Kinotechnik*, 1938, 20, 238-240.—[Abstracted review; original not seen.] This is a reply to an article by Thorner (see XV: 4145). The fact that polarization spectacles, for example, enhance the depth quality of a film considerably is considered a refutation of Thorner.—H. L. Ansbacher (Brown).
4137. Rosenblith, W. A. Industrial noises and industrial deafness. *J. acoust. Soc. Amer.*, 1941, 13, 80-81.—Abstract.
4138. Rothman, S. Physiology of itching. *Physiol. Rev.*, 1941, 21, 357-381.—This is a critical review of theories, electrophysiological analysis, chemical mediation, therapy. Literature through 1940.—M. E. Morse (Baltimore, Md.).
4139. Sachs, E. Mass testing of color vision. *J. Amer. med. Ass.*, 1941, 116, 1769-1770.—Precautions necessary in the use of the Berens-Stein method of mass testing for deficiencies in color vision are discussed.—D. A. Grant (Wisconsin).
4140. Schneider, E. E., Goodeve, C. F., & Lythgoe, R. J. Spectral variation of the photosensitivity of visual purple. *Proc. roy. Soc.*, 1939, A170, 102-112.—(*Sci. Abstr.*, A, XLII: 1693).
4141. Schouten, J. F. [Perception of subjective tones.] *K. Akad. Wetensch., Amst.*, 1938, 41, 1086-1093.—(*Sci. Abstr.*, A, XLII: 1323).
4142. Stevens, S. S., Morgan, C. T., & Volkmann, J. Evidences for a neural quantum in auditory discrimination. *J. acoust. Soc. Amer.*, 1941, 13, 84.—Abstract.
4143. Steward, K. R. Color blindness and tone deafness restored to health during psychotherapeutic treatment using dream analysis. *J. nerv. ment. Dis.*, 1941, 93, 716-718.—3 cases are reported in which color blindness was apparently replaced by normal color vision incidental to psychotherapeutic treatment. In one of the cases tone deafness was also alleviated.—M. Keller (Butler Hospital).
4144. Taylor, F. V. Change in size of the after-image induced in total darkness. *J. exp. Psychol.*, 1941, 29, 75-80.—After observing that to and fro head movements occasion changes in the apparent size of after-images viewed in the dark, a majority of observers reported no change in the size of the after-image when the point of light fixated moved with the head so as to prevent changes in accommodation and convergence. Kinesthetic-tactile components of stimulation are at the basis of the size phenomenon.—M. J. Zigler (Wellesley).
4145. Thorner, W. Der stereoskopische Film. (The stereoscopic film.) *Kinotechnik*, 1938, 20, 237-238.—[Abstracted review; original not seen.] The ordinarily used film has stereoscopic qualities. The following example is given. Pictures taken from a moving train possess a surprisingly large degree of depth even at distances over 240 m., the limit of stereoscopic vision. In monocular vision this effect disappears. It is concluded that perception of depth is a specific sensation which is released by the stimulation of a specific brain center whenever visual stimuli appear in binocular vision for which a spatial arrangement of the objects is the logical conclusion.—H. L. Ansbacher (Brown).
4146. Tussing, L. Perceptual fluctuations of illusions as a possible physical fatigue index. *J. exp. Psychol.*, 1941, 29, 85-88.—The number of fluctuations perceived in 4 reversible illusion figures was less before than after fatigue induced by football, basketball, and rugby practice and by a general fatigue exercise (pulling a machine which created a 50 pound pull an average of 500 feet).—M. J. Zigler (Wellesley).
4147. Ueyama, T. [Visual properties of the path of movement.] *Jap. J. Psychol.*, 1941, 16, 1-25.—In complete darkness an interruption in the path of the movement of a spot light is taken for an obscuration; the light is thought to continue its course and tends to be overestimated in duration. When a geometrical figure is shown in the interrupted

part, the course of the light is qualified along the lines of the figure.—R. Kuroda (Keijo).

4148. Wever, E. G., Bray, C. W., & Lawrence, M. The effects of pressure in the middle ear upon the electrical responses of the cochlea. *J. acoust. Soc. Amer.*, 1941, 13, 83.—Abstract.

4149. Whipple, R. R. Measurements of effectiveness in lighting ping pong tables. *Trans. Illum. Engng Soc. N. Y.*, 1939, 34, 514-522.—(Sci. Abstr., B, XLII: 1700).

4150. Yudkin, S. A new dark adaptation tester. *Brit. J. Ophthalmol.*, 1941, 25, 231-236.—A new instrument devised by R. T. M. Haines is described. Its method of use and advantages over other instruments are discussed. The normal range of dark adaptation is given. A rapid method for surveys of large groups is appended.—R. J. Beitel, Jr. (American Optical Company).

[See also abstracts 4181, 4183, 4244, 4249, 4341, 4356.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

4151. Blakey, R. I. A factor analysis of a non-verbal reasoning test. *Educ. psychol. Measmt.*, 1941, 1, 187-198.—The results of a factor analysis of the inter-correlations of the sub-tests of a non-verbal reasoning test constructed by the author and A. W. Brown are presented. As a group, the tests do measure some of the higher mental processes of reasoning.—P. S. de Q. Cabot (Simmons).

4152. Brogden, W. J. The effect of change in time of reinforcement in the maintenance of conditioned flexion responses in dogs. *J. exp. Psychol.*, 1941, 29, 49-57.—"Conditioned forelimb flexion responses were maintained no longer when five shocks were given at the beginning of the test-period or when as many shocks were given at the end of the experimental period as there were failures of response, than when there was no shock-reinforcement. . . . However, under these conditions of shock-reinforcement, there was a significantly greater frequency of CR during the first half of the experiment than with no shock-reinforcement."—M. J. Zigler (Wellesley).

4153. Forrest, H. deS. Correlations between the constants in the curve of learning. *Stud. Psychol. Psychiat. Cath. Univ. Amer.*, 1941, 5, No. 1. Pp. 43.—A battery of 6 tests of associative learning was used with school children in grades 3 through 8, in order to measure the constants a , b , c in the formula $\log y = a - bc^x$ developed by T. V. Moore as describing the function of associative learning. a represents the logarithm of the number of items, b supposed physiological resistance, c the ability to form associations, while the variables x and y are respectively the number of repetitions and the amount of material. It was found that b and c

were negatively correlated for every grade, and these 2 factors are concluded to be "attributes of the psychobiological organism." An appendix contains tables of the constants for each grade and for the 6 tests used.—H. D. Spoerl (American International College).

4154. Harrison, R., & Nissen, H. W. Spatial separation in the delayed response performance of chimpanzees. *J. comp. Psychol.*, 1941, 31, 427-435.—8 chimpanzees reached an average accuracy of 87.4% in delayed responses when 2 food containers were 60 in. apart as compared with 73.8% when they were 5 in. apart. Baiting the containers when they were 60 in. apart and then shifting them to a position 5 in. apart for the response produced an accuracy of 73.3%. Reversing this procedure lowered the accuracy to 56.4%. "The results suggest that the animals responded to both the 'relative' and 'absolute' positions of the food containers."—K. F. Muensinger (Colorado).

4155. Harrison, R., & Nissen, H. W. The response of chimpanzees to relative and absolute positions in delayed response problems. *J. comp. Psychol.*, 1941, 31, 447-455.—7 adult chimpanzees were used in this experiment. "By shifting the boxes during the delay interval, the experimenter gave the subject opportunity to respond to either relative or absolute position—that is, to the box which had the same position relative to the second box, or relative to stable features of the experimental situation, as had the container which was baited at the beginning of the trial. The results show clearly that the type of response made was a function of the distance between the boxes: When the containers were close together, response was predominately to relative position; when they were farther apart, response to absolute position was dominant."—K. F. Muensinger (Colorado).

4156. Köhler, W. On the nature of associations. *Proc. Amer. phil. Soc.*, 1941, 84, 489-502.—Only one class (contiguity) of the three types of association commonly spoken of (contiguity, similarity, contrast) really involves an association. Association by similarity is a form of recall. The notion of contiguity has been questioned by the Gestalt school which prefers the concept of the organization of experience into unitary entities. The basis of this is the interaction of nervous processes, and resemblance and proximity are factors which aid interaction (as shown in perception). We may assume that neural events leave traces in the nervous system. If interaction has transformed the neural processes into a coherent process, the neural trace will have a unitary character; then, if a part of the trace be later activated, other parts will be indirectly excited, and the result will be contiguity. "Association is therefore simply coherence within the unitary trace of a coherent experience," and can be derived from the notions of organization and traces. Various learning and recall experiments in which the effects of homogeneity and heterogeneity were studied are described, and the results indicate fur-

ther "that associations are after-effects of specific organization or interaction."—C. N. Cofer (George Washington).

4157. Long, L. D. An investigation of the original response to the conditioned stimulus. *Arch. Psychol.*, N. Y., 1941, No. 259. Pp. 43.—The aim of this experiment was to study interrelationships between the original response made by human subjects to the conditioned stimulus and the conditioned response during the course of conditioning and extinction. A modification of the Dodge pendulum photochronograph technique was used in 3 conditioning situations, all of which involved a sound (1000 cycle tone) as the conditioned stimulus and a similar sound, a light, or an electric shock as the unconditioned stimulus to the eye wink. The conditioned response was revealed as an anticipatory lid response occurring between the unconditioned response and the original response to the conditioned stimulus. The results indicated that the conditioned response developed without any apparent modification of the original response to the conditioned stimulus. This finding is interpreted as contradicting those theories, e.g. drainage, dominance, competing reactions, etc., which have assumed the disappearance of the original response with the conditioning of a new one.—K. W. Spence (Iowa).

4158. Lowell, F. E. A study of the variability of IQ's in retest. *J. appl. Psychol.*, 1941, 25, 341-356.—"The data on 3000 children—of whom 1000 had two tests, 1000 three tests, and 1000 four tests—show that the IQ range, the chronological age at first test, and the interval elapsing between first and last tests, may be eliminated as causes for variation in IQ on retest."—E. E. Ghiselli (California).

4159. Meredith, G. P. The transfer of training. *Occup. Psychol.*, Lond., 1941, 15, 61-76.—7 different interpretations are examined, and 3 (from the 167 experiments between 1890 and 1935) are appraised: Sleight's on memory, Thorndike's on thinking power, and Cox's on manual tasks. The significant conclusions from these that are corroborated by other experiments are: (1) The individual's awareness of the usable common element is effective in producing transfer. (2) The use of specifics, instead of such generalities as Latin and arithmetic, is needed in studying the problem of transfer. (3) Transfer takes place on the ideational, not on the neuromuscular level, and training can be generalized only by being explicit. The theoretical issues of the problem are: (1) By which process is transfer effected? 'Identical elements' is ruled out because of confusion of meaning of each term; 'generalization' is accepted because it reduces an unknown process to one with which we are already familiar. (2) In which manner do explicit generalizations produce transfer? The individuality of mind precludes the adoption of results from factor analyses; introspective reports are the most fertile approach. The educational inference is that the child should be regarded as an entering member of society; indi-

vidual needs must be related to the demands of societal patterns.—H. Moore (Business Research Corporation).

4160. Morrison, G. W., & Cunningham B. Characteristics of the conditioned response in cretinous rats. *J. comp. Psychol.*, 1941, 31, 413-425.—The purpose of this experiment was to study the rate of conditioning of congenitally thyroid deficient rats. 3 groups were used, one consisting of 10 normal rats, the second of 9 cretinous rats, and the third of 8 cretinous rats which were fed daily doses of desiccated thyroid. Electric shock applied to the tail was the unconditioned and a buzzer the conditioned stimulus. The normal group reached the criterion of mastery in an average of 105 trials and the medicated group, in 75 trials. 4 of the cretinous group failed to reach the criterion in 180 trials while the remaining 5 reached it in an average of 100 trials. A tentative explanation of these results is offered.—K. F. Muenzinger (Colorado).

4161. Muenzinger, K. F., & Vine, D. O. Motivation in learning: IX. The effect of interposed obstacles in human learning. *J. exp. Psychol.*, 1941, 29, 67-74.—The effect of obstacles upon efficiency in learning a punchboard maze was tested in 6 groups of college students. The obstacle group learned the maze in about half the trials and with about half the number of errors as the control group. The critical ratios, based on the data obtained in these experiments with human subjects, and also in those carried out previously with animals, indicate the facilitating effect of an obstacle between the point of choice and the goal.—M. J. Zigler (Wellesley).

4162. Nissen, H. W., & Harrison, R. Visual and positional cues in the delayed responses of chimpanzees. *J. comp. Psychol.*, 1941, 31, 437-445.—In all trials of this delayed response experiment spatial cues were used. In one half of the trials visual cues were added which consisted of a red circle and a green triangle. There was a slight, though statistically unreliable, increase in accuracy with the addition of the visual cues in the performance of 4 chimpanzees. "In critical tests, visual and positional cues were opposed to each other. The results clearly demonstrate the dominance of the positional cue."—K. F. Muenzinger (Colorado).

4163. Oberlin, D. S. Social background as a factor in the acquisition of general information. *Delaware St. med. J.*, 1941, 13, 133-135.—Cases (adults and children) from rural and urban Delaware to whom the Bellevue Intelligence Scale had been administered were studied. The data indicate that there are no significant rural-urban differences insofar as general information is concerned.—C. N. Cofer (George Washington).

4164. Peak, H. Negative practice and theories of learning. *Psychol. Rev.*, 1941, 48, 316-336.—Negative practice is the name given to the Dunlap method of correcting errors by practicing the errors themselves with knowledge of their incorrectness. Experiments of this sort have proved that repetition

of a response may either increase or decrease its strength, and that repetition of a wrong response knowingly, may increase the probability of occurrence of the right response. This is usually interpreted as confirming the *beta* hypothesis, that repetition of a stimulus-response sequence never affects learning. But this is erroneous, for (1) the meaning of 'repetition' in these hypotheses is ambiguous, (2) *beta* does not follow from a disproof of *alpha* and *gamma*, and (3) negative practice experiments do not provide a situation where all factors except repetition are held constant. Among the possible explanations of the negative practice effect, the advantages and disadvantages of the following principles are indicated: (1) repetition of an S-R sequence strengthens it regardless of the consequences of the response, (2) repetition weakens the response, (3) it reinforces the response when followed by reward and weakens it when followed by punishment, and (4) the expectation that a certain response is right or wrong is strengthened by repetition.—A. G. Bills (Cincinnati).

4165. Thorndike, E. L. Mental abilities. *Proc. Amer. phil. Soc.*, 1941, 84, 503-513.—A variety of topics is discussed, including: a definition of a mental ability as "a probability that certain situations will evoke certain responses, that certain tasks can be achieved, that certain mental products can be produced by the possessor of the ability"; the values and limitations of intelligence testing; some ways in which individuals may differ in intelligence (illustrated by charts); the lack of purity in the abilities as now measured; and some aspects of the neurology necessary to explain abilities.—C. N. Cofer (George Washington).

4166. Youtz, A. C. An experimental evaluation of Jost's laws. *Psychol. Monogr.*, 1941, 53, No. 1. Pp. v + 54.—An attempt is made to evaluate Jost's laws (1. "Given two associations of the same strength, but of different ages, the older one has greater value on a new repetition." 2. "Given two associations of the same strength, but of different ages, the older falls off less rapidly in a given length of time.") as they apply to series of associations which have received various amounts of original learning and have been forgotten to levels of equivalence with younger associations. 15 subjects learned 12-unit nonsense-syllable lists by the spelling-anticipation method to 3 criteria: 12 correct anticipations on a single trial, 7 and 4.5 correct anticipations on two successive trials. Rereading was undertaken at 6 seconds, 10, 20, 40, and 60 minutes for original learning under each of the 3 criteria and at 2 and 24 hours in addition for the original learning to 12 anticipations. Older habits showed larger learning increments after a single rereading trial, confirming Jost's first law. The second law is confirmed as far as the present study goes.—D. G. Ryans (Cooperative Test Service).

[See also abstracts 4171, 4191, 4195, 4206, 4231, 4246, 4277, 4278, 4279, 4281, 4328, 4339, 4466.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

4167. Altmann, M. A study of patterns of activity and neighborly relations in swine. *J. comp. Psychol.*, 1941, 31, 473-479.—The author studied the behavior of 6 pigs each one of which was confined in a separate run with a single pig house in the middle and a feeding and water trough at one end. A photographic record of the pathways made by the animals after a heavy snowfall revealed that some animals sought contact with neighbors while others did not. Since the pigs were also used in an experimental neurosis experiment it was possible to see "a relation between their nervous makeup and their pattern of spontaneous activity. . . . It may be supposed that nervous hypertension, resulting from conditioning experiments, leads to alteration of the normal paths of activity in the pen and tends to reduce the normally occurring neighbor relations among these animals."—K. F. Muenzinger (Colorado).

4168. Altmann, M. Interrelations of the sex cycle and the behavior of the sow. *J. comp. Psychol.*, 1941, 31, 481-498.—The sex cycles of 5 domesticated sows were studied by several test methods. "The observation of the external signs of heat, the spontaneous activity and the bioelectric potential difference allow this determination of sexual phases with accuracy, while the vaginal smear method, the curve of rectal temperature and the nasal smear content did not indicate clear cyclic differences. Deviations from normal behavior in conditioned reflex tests in the laboratory were observed to exist during estrus in motor activity, respiratory rate, salivary secretion and in the disposition of the animal. There are naturally considerable differences among individual sows in the expression of estrus behavior."—K. F. Muenzinger (Colorado).

4169. Bateson, G. IV. The frustration-aggression hypothesis and culture. *Psychol. Rev.*, 1941, 48, 350-355.—The necessity is pointed out for assuming that the frustration-aggression hypothesis refers simply to sequences of culturally modified acts. Two cultures are contrasted, the Iatmul of New Guinea, and the Balinese. The hypothesis fits the former perfectly, with the added modification that they have invested aggression with pleasure and convert all their conative efforts into imaginary aggressions. But the Balinese show no aggression reaction whatsoever to interruptions of their acts. Only the children show signs of frustration and temper tantrums. They lose these later as a result of the unique relations in play between mother and child which discourage any goal-expectancy set.—A. G. Bills (Cincinnati).

4170. Beach, F. A. Copulatory behavior of male rats raised in isolation and subjected to partial decortication prior to the acquisition of sexual experience. *J. comp. Psychol.*, 1941, 31, 457-471.—This is part of a study the purpose of which is "to compare the relative effects of cortical destruction upon sexually-experienced and inexperienced male

rats." In the present experiment 46 inexperienced animals were used which were raised in isolation between the time of weaning and the tests. 24 of these rats were subjected to partial decortication, and the remaining 22 were used as controls. At the age of about 120 days all animals were given 7 tests with receptive females during which 68% of the normal group and 25% of the previously operated group copulated. Comparing the results with those of a previous experiment the author concludes that "the copulatory behavior of virgin male rats raised in isolation and subjected to cortical destruction at maturity was closely comparable to the mating reactions of males partially decorticated after the acquisition of sexual experience. In both cases the proportion of post-operative copulators was inversely related to the percentage of cortex removed."—K. F. Muenzinger (Colorado).

4171. Burrow, T. Kymograph records of neuromuscular (respiratory) patterns in relation to behavior disorders. *Psychosom. Med.*, 1941, 3, 174-186.—This is a report of experiments to investigate the physiological changes revealed by respiratory rate, minute volume of air inspired, tidal air, and oxygen utilization during states of attention and contention. Kymograph tracings of the latter state recorded the modification of attention as a group reaction. 3 major alterations noted were: slower respiration, diminution of eye movement, and the absence of affecto-symbolic images. Behavioral functions of the organism reacting as a whole or as a result of the dominance of secondary symbolic reaction-patterns are revealed by objective physiological evidence.—P. S. de Q. Cabot (Simmons).

4172. Child, C. M. Patterns and problems of development. Chicago: Univ. Chicago Press, 1941. Pp. 820. \$8.00.—This textbook in developmental physiology compares and analyzes data concerning some of the various sorts of development and the characteristics of their patterns.—(Courtesy Publishers' Weekly).

4173. Cornsweet, A. C. Induction and recovery sequence after anesthetization. IV. Pure gasoline. *J. comp. Psychol.*, 1941, 31, 499-509. Also *J. exp. Psychol.*, 1941, 29, 58-66.—20 rats were subjected to anesthetization by volatile gasoline and the behavior sequences during induction of, and recovery from, anesthesia were noted. These sequences were remarkably uniform for the different animals. "The loss of motor function upon induction was in the caudo-cephalad direction, while their recovery was essentially cephalo-caudad." Similar results with different anesthetics had been obtained by the author in previous experiments (see XIII: 825, 1915, 4083). The significance of these results in regard to the study of foetal and post-natal developmental sequences is discussed.—K. F. Muenzinger (Colorado).

4174. Faulkner, W. B. Esophageal spasm. *J. nerv. ment. Dis.*, 1941, 93, 713-715.—Esophagoscopy examination of a patient suffering from esophageal spasm revealed that the spasm occurred when the

patient was asked to imagine situations usually accompanied by anxiety, fear, and dissatisfaction. When directed to imagine pleasant and desirable events relaxation occurred.—M. Keller (Butler Hospital).

4175. Faulkner, W. B. The effect of the emotions upon diaphragmatic function. *Psychosom. Med.*, 1941, 3, 187-189.—Diaphragmatic movements of increased amplitude may be caused by pleasant emotions and restricted by suggested imaginary situations arousing unpleasant emotions. Idiopathic cardiospasm is caused primarily by real or imagined unpleasant situations producing emotions of a similar quality. These findings are based upon a study of the subjective reactions of patients as well as of the results of esophagoscopy, roentgenologic, and fluoroscopic examinations.—P. S. de Q. Cabot (Simmons).

4176. Freeman, G. L., & Sharp, L. H. Muscular action potentials and the time-error function in lifted weight judgments. *J. exp. Psychol.*, 1941, 29, 23-36.—The course of the muscular action potentials taken from the biceps during a 60 sec. period following the lifting of a 500 gr. weight through 60 degrees of arc parallels the course of the time-error function for lifting weights of 475, 500, and 525 gr. with time separations of 4, 8, 15, 30, and 60 sec. At 4 seconds, the average microvoltage for 5 trials is greater than the resting level, and the time-errors are positive (more "lighter" judgments); for all the other temporal points, the microvoltage is below the resting level, and the time-errors are negative (more "heavier" judgments). Neither curve had returned to the normal resting level at 60 sec.—M. J. Zigler (Wellesley).

4177. Hasegawa, T. Über die labyrinthären Augenbewegungen bei Änderung der Kopfage und bei Progressivbewegungen. (Labyrinthine eye movements in connection with changes in the position of the head and progressive movements.) *Acta oto-laryng., Stockh.*, 1940, 28, 593-600.—To nystagmus and compensatory eye movements, the author adds a third type of labyrinthine eye movements. They were observed in rabbits and appear with changes in position of the head and with progressive movements. An apparatus for registering them is described. They belong to 2 groups: (1) a symmetrical reaction in which the 2 eyes move always in the same direction; (2) an asymmetrical reaction in which the 2 eyes move always in opposite directions. The first occurs both with change in the position of the head in the sagittal plane and with progressive movements in the dorso-ventral axis or in the longitudinal axis of the body. The second takes place with change in the position of the head in the frontal plane and with progressive movements in the bilateral axis. The eye moves neither horizontally nor vertically, but always slantingly, forward and upward or backward and downward. In the symmetrical reaction, all 4 otolith membranes probably move in the same direction.—E. M. Pilpel (New York City).

4178. Hoskins, R. G. *Endocrinology; the glands and their functions*. New York: Norton, 1941. Pp. 388. \$4.00.

4179. Huzita, Y. [Some experimental results showing the reactive behavior of homing pigeons and some wild birds when their nests were removed to other places.] *Jap. J. Psychol.*, 1941, 16, 45-55.—Homing pigeons and some wild birds continue brooding even after their nests have been removed to other near-by places, and homing behavior is still possible.—R. Kuroda (Keijo).

4180. Katura, H. [An experiment on the behavior of the spider.] *Jap. J. Psychol.*, 1941, 16, 56-69.—Successive processes of spinning a web, its partial repairing, and other related behavior in the spider are described.—R. Kuroda (Keijo).

4181. Keller, F. S. *Light-aversion in the white rat*. *Psychol. Rec.*, 1941, 4, 235-250.—This is an experiment with adult albino rats to discover whether the motivating factor of illumination is influential in lever pressing behavior, and whether it is related to the intensity of illumination. Light aversion appeared to be established, and the drive varied with the intensity of illumination used.—P. S. de Q. Cabot (Simmons).

4182. Kessler, M. M. *Spontaneous and reflex emotional responses differentiated by lesions in the diencephalon*. *Proc. Soc. exp. Biol., N. Y.*, 1941, 47, 225-227.—Monkeys and cats were employed in these studies. In one operation the hypothalamus was totally destroyed; in a second, this same region was ablated along with involvement of the ventro-median portion of the thalamus; in a third, unilateral destruction of the hypothalamus was accomplished; and in a fourth, unilateral destruction of the ventro-median portion of the thalamus. Where the hypothalamus is not functioning, there can be no spontaneous emotional display and stupor intervenes. In such preparations, the thalamus is intact and is able to mediate pain stimuli and to effect demonstrations of emotions on painful stimulation. As the stupor deepens, the thalamic functions are impaired and reflex emotional reactions may no longer be elicited. The ventro-median nuclei of the thalamus play an important part in the elaboration of reflex emotional responses. Partial lesions of the hypothalamus or the ventral portion of the thalamus seem to produce an unusual lability of the subject's emotional display.—H. Peak (Randolph-Macon).

4183. Lawrence, M. *Vitamin A deficiency and its relation to hearing*. *J. exp. Psychol.*, 1941, 29, 37-48.—In the rabbit the auditory mechanism remains functionally unimpaired during 4½ months feeding of a diet deficient in vitamin A. There was no behavioral indication of deafness; electrically recorded responses of the cochlea were similar to those secured from controls both in intensive and frequency ranges; the records of nerve spikes were also similar for experimental and control animals. Histological examination, extending over a 5 month period, revealed no anatomical changes in the cochlea

of the experimental rabbit except serious labyrinthitis in moderate degree.—M. J. Zigler (Wellesley).

4184. Maslow, A. H. VII. *Deprivation, threat, and frustration*. *Psychol. Rev.*, 1941, 48, 364-366.—A distinction is made between frustration which merely involves deprivation, and that which brings a threat to the personality, his life-goal, defensive system, security, or self-esteem. It is contended that only the latter kind has the multitude of undesirable effects which are commonly attributed to frustration in general. Therefore the concepts of deprivation and threat to the personality are the more useful and definitive ones.—A. G. Bills (Cincinnati).

4185. Miller, N. E. (with collaboration of Sears, R., Mowrer, O., Doob, L., & Dollard, J.). I. *The frustration-aggression hypothesis*. *Psychol. Rev.*, 1941, 48, 337-342.—A previous statement in the book *Frustration and aggression*, that "the occurrence of aggression always presupposes the existence of frustration, and, contrariwise, frustration always leads to some form of aggression" is misleading in the latter half. A suggested reformulation is that "frustration produces instigations to a number of different types of response, one of which is an instigation to some form of aggression." The determination of the presence of such an instigation, when the overt behavior is prevented, can be made by observing indirect or less overt acts. 4 chief lines of investigation suggested by the hypothesis are outlined. This and 6 further articles are revisions of papers read at a symposium on effects of frustration.—A. G. Bills (Cincinnati).

4186. Mirsky, I. A., Piker, P., Rosenbaum, M., & Lederer, H. *"Adaptation" of the central nervous system to varying concentrations of alcohol in the blood*. *Quart. J. Stud. Alcohol*, 1941, 2, 35-45.—9 tests were performed on 8 subjects. 4-10 hours elapsed from the time the patients became intoxicated until they became sober again. In all but one instance they became sober at a blood alcohol concentration which was higher than that at which they developed well-defined signs of intoxication. It is suggested that the central nervous system is capable of developing the ability to function adequately despite high concentrations of alcohol in the blood and cerebrospinal fluid.—W. L. Wilkins (Milwaukee, Wis.).

4187. Osborne, R. L. *Sympathomimetic drugs*. *Lancet*, 1940, 238, 116-117.—The author reviews and discusses experiments by himself and others with epinephrine, catechol, chloracetocatechol, ethylcatechol, and other drugs whose effect is sympathomimetic (simulates effects produced by stimulation of the sympathetic nervous system). On the basis of the experiments reviewed he suggests, in conclusion, "that the effects which Cannon has found and attributes to sympathin are the result of the actions of the breakdown products of epinephrine secreted by the nerve endings stimulated. There is an enzyme present locally which destroys the epinephrine liberated normally and restricts its effects to that locus. On repeated stimulation in an abnormal

manner after Cannon's technique, some of these breakdown products escape into the blood stream and produce the effects of sympathin . . . sympathin *E* is epinephrine or a close degradation product containing the amine radical, and sympathin *I* is a breakdown product, either chlorethanolcatechol, or closely related, without the amine radical. . . ." 19 references.—C. K. Trueblood (Cambridge, Mass.).

4188. Pear, T. H. What is clumsiness? *Brit. J. educ. Psychol.*, 1941, 11, 99-108.—Broadly conceived as the antithesis of skill, clumsiness may be described as the ". . . inability to perform an action efficiently in circumstances favoring the expectation of high ability." In this sense clumsiness is ascribable to animals, as exemplified by the behavior of certain of Köhler's apes in problem situations, and to young children, where it may have a survival value. To the extent that social skill involves muscular adjustment, ineptness in social relationships may be regarded as a kind of clumsiness; speech-clumsiness is apparent at several levels of social intercourse. The existence of clumsiness cannot be adjudged independently of a knowledge of the aims of the movements. Clumsiness seems to be associated with the "learner type" to which an individual belongs, as the automatizer seldom appears awkward, while the intellectualizer occasionally exhibits signs of clumsiness. Studies have suggested a direct relation between bodily type and the character of expressive movement. Finally, since the possession of certain skills is a mark of financial and social status, clumsiness affects the individual's general social relationships and attitudes.—R. C. Strassburger (St. Joseph's College for Women).

4189. Richter, C. P. Biology of drives. *Psychosom. Med.*, 1941, 3, 105-110.—Experimental evidence collected by the writer reinforces Claude Bernard's thesis of the necessity of the organism to maintain a constant internal environment. Special reference is made to the maintenance of the internal water balance; of a constant body temperature; and of constant mineral, carbohydrate, and fat levels. Experiments on adrenalectomized and parathyroidectomized rats affecting the regulation of sodium metabolism and calcium and phosphorus metabolism respectively lend additional support to the fact that after the removal of the physiological means of maintaining an internal environmental balance the organism maintains a drive to restore that balance. The same principle held true for fat and carbohydrate metabolism with pancreatectomized rats. Implications for human activity are discussed.—P. S. de Q. Cabot (Simmons).

4190. Rosenzweig, S. III. Need-persistent and ego-defensive reactions to frustration as demonstrated by an experiment on repression. *Psychol. Rev.*, 1941, 48, 347-349.—The distinction is made between the type of reaction which looks to the fate of a frustrated segmental need only, and one which looks to the fate of the individual as a whole. 2 groups of subjects were given a series of jig-saw puzzles to solve and were allowed to finish only half of them. To one group the puzzles were presented

informally, to the other as an intelligence test. The first group was expected to recall more unfinished tasks, because the subjects were operating only under the need-persistent tension and hence would respond more to the added task-tension. The second group, already responding to the ego-defensive reaction, i.e. the repression of memory of failure, was expected to recall less unfinished tasks. The hypothesis was substantiated by the results.—A. G. Bills (Cincinnati).

4191. Sears, R. II. Non-aggressive reactions to frustration. *Psychol. Rev.*, 1941, 48, 343-346.—Taking into consideration the effects on subsequent behavior of the primary instigation, the goal-response to which has been frustrated, there are 3 possible action sequences which can occur: (1) persistent or non-adjustive ones, in which the same instrumental acts leading to the same goal response are repeated; (2) trial and error learning, in which a different set of acts prepares the organism to perform the same goal response; (3) a different set of instrumental acts, leading to the performance of a different goal response, as, for example, the so-called substitute response. 2 immediate problems for research are (1) explaining the repertory of frustration-reactions available, and (2) determining the specific factors that cause one kind of frustration reaction rather than another to occur.—A. G. Bills (Cincinnati).

4192. Seward, J. P. The hormonal induction of behavior. *Psychol. Rev.*, 1941, 48, 302-315.—The tendency of modern psychology to emphasize peripheral rather than central mechanisms, because of their greater ease of objective approach, has led to a theory that, in reproductive activities, the hormones exert their effects on behavior through the genital tract, while the nerve centers merely transmit afferent impulses from these hormone-sensitive tissues. The experimental evidence indicates, however, that in many mammals the typical reproductive activities can occur without reinforcement from the viscera most concerned. The evidence strongly suggests a direct action of the hormones on the brain stem, but the crucial experiment has yet to be performed.—A. G. Bills (Cincinnati).

4193. Sharp, L. H. Effects of residual tension on output and energy expenditure in muscular work. *J. exp. Psychol.*, 1941, 29, 1-22.—The course of residual tension in the resting arm, following a 2 minute period of ergographic work, is not of a gradually fading but of a cyclic character. The maximum of the level of residual tension occurs about 15 minutes after the inducing work. Double work periods can be so spaced as to yield greater output with less expenditure of energy in the second work period by having the second coincide with the presumed state of supernormal recovery tension.—M. J. Zigler (Wellesley).

4194. Soderwall, A. L., & Blandau, R. J. Effectiveness of various methods of sex hormone administration for the induction of heat in the spayed female guinea pig and rat. *Endocrinology*, 1941, 28,

1004-1006.—"The oral and percutaneous methods of administration of sex hormones to the spayed guinea pig and rat are much less effective than the subcutaneous route for the induction of mating responses. The rat shows the greater refractoriness to hormone therapy regardless of the route used in administration. Percutaneous administration is more effective than oral administration, less effective than subcutaneous injection."—D. A. Grant (Wisconsin).

4195. Tolman, E. C. Motivation, learning and adjustment. *Proc. Amer. phil. Soc.*, 1941, 84, 543-563.—The author raises the following questions: "Why on a particular occasion a given individual wants what he wants?" What laws determine these wants? How can inappropriate wants be made appropriate? In answer, the following points are discussed: (1) drives: biological (appetites and aversions) and social; (2) values and valences; (3) beliefs, and the distinction between instrumental and equivalence beliefs; (4) the frustration mechanisms. In the discussion of group motivation and adjustment, group identification and displaced aggression are stressed, with reference to Nazi Germany and Fascist Italy and to commitments which Democracy must make in order to survive satisfactorily.—C. N. Cofer (George Washington).

4196. Wyss, W. H. v. Über affektives Wahrnehmen und Erleben. (Affective perception and experience.) *Schweiz. med. Wschr.*, 1941, 71, 425-426.—Consciousness experiences the environment emotionally and through the idea of a connected world. The impressions which nonprimitive man gets from emotional experience affect his values. Experiences are of emotional importance only when related to individual life interests; because these are bound up with the primitive urges, they are similar in different persons. Affective perception, differentiated emotion, and specific expressive movements have a single origin.—M. E. Morse (Baltimore, Md.).

[See also abstracts 4110, 4146, 4160, 4161, 4229, 4241, 4251, 4252, 4253, 4264, 4267, 4268, 4281, 4313, 4317, 4333, 4339, 4351, 4365, 4373, 4439, 4447, 4448, 4459.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

4197. Garma, A. Psicoanálisis de los sueños. (Psychoanalysis of dreams.) Buenos Aires: Ateneo, 1940. Pp. 235.—[Abstracted review; original not seen.] This is an exposition of the psychoanalytic dream theory, illustrated by numerous interpretations of dreams. In the chapter on the traumatic situation Garma presents his own views, namely, that the dream attempts not only to satisfy the wishes but, through them, to correct the situation. There is a historical introduction and an appendix treating of Calderón's *Life is a dream*.—M. E. Morse (Baltimore, Md.).

4198. Jung, C. G. Psychologie und Religion. (Psychology and religion.) Zürich: Rascher, 1940. Pp. 190.—See XII: 2412.

4199. Landis, C. Psychoanalysis and scientific method. *Proc. Amer. phil. Soc.*, 1941, 84, 515-525.—Psychoanalysis has 3 essential themes: therapy, theory, and method. Most of the controversy has arisen about metapsychology which Freud formulated to explain the phenomena revealed by the therapy. The method of analysis is briefly described. Psychologists who have published accounts of their analyses have described the following phenomena as occurring during analysis: anxiety, resistance, unconscious memories, regression, the Oedipus complex, the dynamic unconscious, dream symbolism, transfer, and insight. Each of these phenomena is briefly described, and the author holds that the principles of general experimental psychology can explain them, without resort to metapsychology. The Freudians have overemphasized sex; one might speak of the undifferentiated emotions of the early years. Contributions of psychoanalysis to psychology are discussed.—C. N. Cofer (George Washington).

4200. Lorand, S. Hypnotic suggestion: its dynamics, indications, and limitations in the therapy of neurosis. *J. nerv. ment. Dis.*, 1941, 94, 64-74.—In hypnotic suggestion the therapist's results are due to the transference situation, since fundamentally such suggestion is based on the revival of early childhood dependence of the child on his parents. The emotional state of the therapist greatly influences the attitude of his patient which, in turn, determines the therapeutic achievement. The limitations of treatment by hypnosis should be recognized. For therapeutic reasons a superficial state in hypnosis is preferable, and it is important that after hypnotic treatment follow-up therapy on a conscious level should be continued.—M. Keller (Butler Hospital).

4201. Pires, N. Reflexões a propósito do valor terapêutico da psicoanálise. (Reflections on the therapeutic value of psychoanalysis.) *Neurobiologia, Pernambuco*, 1940, 3, 130-146.—[Abstracted review; original not seen.] The author discusses several topics, based on his experience as analyst and analysand. In explaining failures and recurrences, he stresses the great importance of the patient's actual situation and conflicts. Modification of conditions of life, environment, habits, etc. is indispensable for cure. The systematic ignorance of the conscious which some analysts affect leads to arbitrary interpretations. Orthodox analysis is insufficient for cure and should be supplemented by other technics (education, suggestion, Individual Psychology, active intervention). He goes into the controversy over active and passive analysis.—M. E. Morse (Baltimore, Md.).

4202. Rhine, J. B. Experiments bearing upon the precognition hypothesis. III. Mechanically selected cards. *J. Parapsychol.*, 1941, 5, 1-57.—Subjects performed 1,608 runs through the full deck of ESP cards, matching the cards against 5 blank spaces in which they were later placed by a mechanical selector. By 8 different standard measures,

the results were extra-chance in character. They appear to be explicable only by the assumption of an ability to respond as if to cognition of events not yet in existence and not rationally inferable or voluntarily produceable. The effects of rewards, grouping of subjects, and certain other conditions were also experimentally analyzed.—*D. W. Chapman* (Bennington).

4203. Ronchevsky, S. P. [The theory of hallucinations.] *Neuropat. Psikhiat.*, 1941, 10, No. 3, 53-58.

4204. Smith, B. M., & Gibson, E. P. Conditions affecting ESP performance. *J. Parapsychol.*, 1941, 5, 58-86.—This paper presents, as direct quotations, the opinions, judgments, and conclusions of experimenters concerning what may inhibit or facilitate performance of subjects in ESP tests. The conditions covered are: (1) freedom, pleasure, excitement, and interest; (2) disposition, mood, personality, and health; (3) variation and decline of ESP ability; (4) abstraction, relaxation, and concentration; (5) distraction; (6) witnesses; (7) feeling of success; (8) distribution of ESP ability; (9) fatigue; (10) role of the agent; (11) hypnotism and suggestion; (12) condition of stimulus-material; (13) distance, time, and physical barriers; (14) novelty of materials and situations; (15) drugs; (16) training; (17) rôle of the experimenter; (18) volition; (19) observers; (20) rhythm; (21) action; (22) blindness. Bibliography of 49 authors.—*D. W. Chapman* (Bennington).

4205. Székely, B. El psicoanálisis: teoría y aplicación. (Psychoanalysis: theory and practice.) Buenos Aires: Colegio Libre Estudios Superiores, 1940. Pp. 276.—[Abstracted review; original not seen.] This is a series of lectures setting forth various aspects of Freud's theory including psychoanalysis of war and anti-Semitism; Freud and Marx; and psychoanalysis in education, criminology, literature, and art. Székely believes that eventually orthodox psychoanalysis will be integrated with other currents, such as Individual Psychology. The book is adapted both to specialists and general readers.—*M. E. Morse* (Baltimore, Md.).

[See also abstracts 4320, 4329, 4429.]

FUNCTIONAL DISORDERS

4206. Benton, A. L., & Howell, I. L. The use of psychological tests in the evaluation of intellectual function following head injury: report of a case of post-traumatic personality disorder. *Psychosom. Med.*, 1941, 3, 138-151.—The degree and nature of intellectual impairment of a 52 year old patient could not be easily estimated clinically. Various psychological tests including the Rorschach and the similarities test of the Bellevue Scale were given. Performance on these tests revealed an impairment of abstract thinking, an inability to handle spatial-objective problems, an incapacity to differentiate a complex visual stimulus, and a rigidity of mental set combined with a poverty of associational activity.—*P. S. de Q. Cabot* (Simmons).

4207. Bermann, G. La neurosis en la guerra. (War neurosis.) Buenos Aires: López, 1941. Pp. 251.—[Abstracted review; original not seen.] This book is the result of Bermann's personal experience during the Spanish War, most of it written under fire. The first and last chapters give a comprehensive review of the subject: practical problems of military neuropsychiatry and mental diseases among the civil and military populations during war. Other chapters are devoted to psychotherapeutic methods during war and in neuropsychiatric centers at the front, mental hygiene of the soldier, concussion due to explosion of projectiles, physiopathic disturbances, nervous attacks, war hysteria, neurasthenic syndrome, and malingering.—*M. E. Morse* (Baltimore, Md.).

4208. Bonhoeffer, K. Die Geschichte der Psychiatrie in der Charité im 19. Jahrhundert. (The history of psychiatry in the Charité in the 19th century.) Berlin: Springer, 1940. Pp. 28. RM 1.80.—[Abstracted review; original not seen.] Interest in mental patients arose originally from a desire to protect the community against asocial behavior and other disturbances of public law and order. The freeing of psychiatry from this non-medical viewpoint was the problem of the entire 19th century. The gradual improvement in the conditions of care and treatment of the mentally ill is presented in tracing the history of the first independent mental hospital established in Berlin.—*M. Keller* (Butler Hospital).

4209. Bowman, K. M., & Jellinek, E. M. Alcohol addiction and its treatment. *Quart. J. Stud. Alcohol*, 1941, 2, 98-176.—Chronic alcoholism and alcoholic addiction are distinguished. Reasons for drinking are reviewed and studies of the personality of the drinker redacted. A diagrammatic presentation of a classificatory system of abnormal drinkers is given. Steady drinkers are classified as primary addicts (decadent, discordant, compensating, or poverty stricken), as stupid drinkers, and as symptomatic drinkers (schizoids, schizophrenics, or early general paretics). Intermittent drinkers are classified as irregular or periodic, with the irregular being exuberant, occupational, or of the *Stammtisch* kind (social compensating, easy going, or promotional), and the periodic being the epileptic and epileptoid, the manic-depressive, and the hypothetical true dipsomaniacal. Treatments are reviewed, with major emphasis on psychotherapies. 195 references.—*W. L. Wilkins* (Milwaukee, Wis.).

4210. Campbell, C. M. The national emergency and psychiatry: civilian and military demands. *J. nerv. ment. Dis.*, 1941, 93, 764-765.—Abstract.

4211. Cutler, E. C. What physicians expect from psychiatry. *War Med.*, Chicago, 1941, 1, 352-357.—They expect common sense, the detection of men whose nervous systems will not stand military life, and the creation of standards for choosing the best types for the service. Local boards have the advantage of being able to consult the family and employer. The selectee's attitude is very important;

it should be analogous to that which makes for success in industrial personnel—a feeling of individual value and working toward success. Poor material may be taken far by a good officer, but certain traits must be ruled out, even in a willing selectee. The requirements are high intelligence, cooperativeness, and effectiveness. During the last war the greatest number of rejections for neuropsychiatric reasons were feeble-mindedness, followed by epilepsy, psychoneuroses (hysteria predominating), drug addiction, civil offenses, and previous treatment in mental hospitals.—*M. E. Morse* (Baltimore, Md.).

4212. *Ellermann, M.* Sind og mennesker. Psykologiske erfaringer fra sindslidelser. (Mind and man. Psychological experiences from mental ailments.) Copenhagen: Jul. Gjellerup, 1940. Pp. 105. Kr. 5.00.

4213. *Ford, H.* The early recognition of maladjusted personalities by draft boards. *Dis. nerv. Syst.*, 1941, 2, 212-218.—A detailed analysis is presented of the 2% of the soldiers of the last war who developed neuropsychiatric disorders. Applying this figure to World War II, we may expect that some 80,000 similar cases will develop unless they are subjected to early recognition and elimination from army service. Of these, 62.5% are of such a nature that detection of their lack of fitness by the draft board is improbable. To assist the examining physician the author has prepared a brief method of personality study, through which, by special attention to 2 broad categories, most of these cases may be detected before induction. The first category aims to expose any history suggestive of poor endowment, and emphasizes education, occupation, delinquency, development and illnesses, etc.; the second, attempts to reveal behavior suggestive of instability by observing the draftee at the time of examination. These points are further elaborated, together with comments regarding the return of such cases to useful civilian life.—*C. E. Henry* (Western Reserve).

4214. *French, T. M., & Alexander, F.* Psychogenic factors in bronchial asthma. Part I. *Psychosom. Med. Monogr.*, 1941, 1, No. 4. Pp. 92.—This is a report of the results of a 4-year study by the research staff of the Institute for Psychoanalysis. The important question is the degree of cooperation between allergic and psychological etiology. An hereditary factor seems to be fairly well established. Asthmatic attacks tend to be most severe at night. The central emotional problem concerns separation from the mother, and there is a relationship of the asthma to suppressed crying for the mother. The sexual impulse seems to be most significant in the precipitation of attacks. Many asthmatic sufferers have difficulty in finally deciding to marry. One connecting link between many findings is "that the threshold for allergic sensitiveness is dependent upon the emotional state of the patient." Asthmatic children show marked over-anxiety, a lack of self-confidence, and intense sibling rivalry; their

mothers show a deprecatory attitude toward the fathers. The fantasies and wishes of asthmatic children usually center about intra-uterine situations. When asthmatic children are placed in environments unlike the usual family situation, the asthma markedly improves or disappears entirely.—*P. S. de Q. Cabot* (Simmons).

4215. *Freyhan, F. A.* The meaning of functional disorders. *Delaware St. med. J.*, 1941, 13, 122-125.—This is a criticism of the too general assumption of functional factors in disease and a discussion of the complex meaning of functional pathology.—*C. N. Cofer* (George Washington).

4216. *Gaupp, R.* Die psychischen und nervösen Erkrankungen des Heeres im Weltkrieg. (The psychic and nervous diseases of the army during the World War.) *Dtsch. Militärzt.*, 1940, 5, 358.—[Abstracted review; original not seen.] Gaupp's experience shows that genuine psychoses and epilepsy are independent of war influences, but psychogenic diseases are considerably increased. Neurasthenia, referred to any organ, arises from prolonged physical and mental exertion or continuous oppressive situations (*Sitzkrieg*, family worries, climatic extremes, etc.). Fear reaction may be expressed through fainting, delirium, stupor, or excitement. In mentally sound men fear effects soon disappear. The most important war neurosis is hysteria, arising from the unconscious wish to get out of front-line duty. Its manifestations appear to be more massive in war than in peace and appear as psychogenic deafness, tremor syndrome, astasia-abasia, etc. The symptoms recur not only on threatened return to the front, but for years afterward in certain peace-time situations. Malingering is more frequent than was originally believed. Neurotics are not only useless in war but also a considerable danger at home.—*M. E. Morse* (Baltimore, Md.).

4217. *Gegenheimer, R. A.* An evaluation of emotional factors in supervision. *Amer. J. ment. Def.*, 1941, 45, 610-616.—A social worker who supervises the community adjustment of paroled girls describes the emotional problems of these defectives.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

4218. *Gordon, G. J., & Lawrence, B. G.* Loss of personal identity (amnesia) and its role in organic syndromes. *Delaware St. med. J.*, 1941, 13, 106-112.—Two case reports are given which show the organic background on which memory defect and the loss of personal identity developed. Also involved were emotional complications. We should "study the amnesia syndromes from the angle of psychosomatic integration rather than from that of their meaning in strictly psychological terms. . . ."—*C. N. Cofer* (George Washington).

4219. *Gray, R. C.* Schizophrenia in childhood. *Minn. Med.*, 1940, 23, 565.—[Abstracted review; original not seen.] This article includes a brief description of childhood schizophrenia with a review of its differential diagnostic features, a dis-

cussion of its incidence and prognosis, and a case report of a patient affected with schizophrenia from the age of 9 to 24 years.—*M. Keller* (Butler Hospital).

4220. *Hall, R. W. Peculiar personalities. War. Med., Chicago, 1941, 1, 383-386.*—Hall outlines the development of the concept of psychopathic personalities, the diagnosis, and the problems which such persons create in the army. Of all abnormal types, they are the most numerous, the most desirous of military service, and the most subversive to morale. They often make a deceptively good first impression. The history (from applicant, family, employer, and social agencies) is the only sure method of diagnosis. Few developed manic or depressed applicants will present themselves, but there will be numerous men with mild hypomanic or depressive states. The general impression and the history are the best guides. A man whose parent is in a mental hospital should be referred to the psychiatrist for decision.—*M. E. Morse* (Baltimore, Md.).

4221. *Haworth, N. A., & Macdonald, E. M. The theory of occupational therapy. London: Baillière, Tindall & Cox, 1940. Pp. x + 132. 6 s.*—[Abstracted review; original not seen.] Occupational therapy is not a treatment of disease, but of patients.—*W. L. Wilkins* (Milwaukee, Wis.).

4222. *Hayman, M. Use of serial sevens in psychiatric examination. Amer. J. Orthopsychiat., 1941, 11, 341-356.*—The serial subtraction of 7 from 100 is one of the most widely used tests for the determination of the available intellectual resources of a patient with mental disorder. Using school children and normal adults as subjects the author has standardized this test and correlated it with intelligence level. Then the test was applied to 430 patients on the admission service of a large mental hospital. Types of performance were related to the condition of the patients.—*R. E. Perl* (Jewish Board of Guardians).

4223. *Hennessey, M. A. R. Homosexual charges against children. J. crim. Psychopath., 1941, 2, 524-532.*—The study presents follow-up data on 66 boys and 14 girls charged with homosexual behavior (arbitrarily limited to fellatio, cunnilingus, sodomy, transvestism, and tribadism). In general, homosexual charges against children appear very infrequently in the juvenile court. Determining factors are multiple in each case, but amoral and immoral homes, lack of religious training, and lack of ethical precept or example are potent factors. Little emotional conflict seems to accompany the sexual offense even when the child is seduced by adults. Mentally stable boys with higher than borderline intelligence constitute good probation risks while girl offenders require a change in environment because of the danger of recidivism.—*A. Chapanis* (Yale).

4224. *Hoffman, J. L., Parsons, E. H., & Hagan, M. W. The post-hospital adaptation of a selected group of patients with dementia praecox. J. nerv. ment. Dis., 1941, 93, 705-712.*—This is a report of a

follow-up study of all dementia praecox patients admitted to St. Elizabeths Hospital from the U. S. Army during 1926-1935 and subsequently discharged. Relatively complete information was obtained on 127 such patients. It was found that after a lapse of time varying from one to 12 years 28.4% of this group are well-adjusted in the community, 25.2% are making an acceptable adjustment with assistance, 34.7% are in mental hospitals, 2.3% are in jail, and 9.4% have died. These data are compared with similar data from other published investigations showing a higher percentage of rehospitalization. It is emphasized that the cases reviewed here constitute an "insured" group in that the conditions of military service assured them early detection of their illness, prompt and adequate hospitalization, and assistance after discharge—all features which are presumed to influence the prognosis of mental disease in general and dementia praecox in particular.—*M. Keller* (Butler Hospital).

4225. *Hubbell, H. G. Family care at Newark State School. Amer. J. ment. Def., 1941, 45, 579-583.*—The family-care movement in this New York institution dates from 1931. At present about 5% of the resident population is so placed. Patients averaged 27 years of age at the time of foster-home placement, and their IQ's averaged 47. Some have become partially self-supporting. The young children who are sent to the institution now are placed in foster homes where there are good schools. Doubts regarding the benefits derived from this type of care have disappeared.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

4226. *Kallmann, F. J., Barrera, S. E., Hoch, P. H., & Kelley, D. M. The role of mental deficiency in the incidence of schizophrenia. Amer. J. ment. Def., 1941, 45, 514-539.*—The authors distinguish between the idiopathic, symptomatic, and exogenous forms of the 2 diseases; anthropometric, psychographic (Rorschach), and electroencephalographic data assist in forming these diagnoses. The problem of the mutual interrelations for each combination was studied. Clinical data on twin pairs showing concurrence of psychotic and defective manifestations are cited. Findings definitely indicate that the endogenous forms of these diseases are based on different genetic factors which are specific and unrelated. Findings failed to confirm theories claiming the possibility of an alternative incidence of the 2 syndromes resulting from external factors or from a common mechanism of unspecific inheritance. Bibliography of 39 titles.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

4227. *Karpman, B. The chronic alcoholic as a neurotic and a dreamer. J. nerv. ment. Dis., 1941, 94, 17-40.*—This is a case report of an individual suffering from a deep-seated anxiety neurosis arising from homosexual and bisexual difficulties. Alcohol was used to relieve the anxiety. The author suggests that alcoholism is often no more than the surface expression of an underlying neurosis.—*M. Keller* (Butler Hospital).

4228. Kinder, E. F., Chase, A., & Buck, E. W. Data secured during a follow-up study of girls discharged from supervised parole from Letchworth Village. *Amer. J. ment. Def.*, 1941, 45, 572-578.—Certain outstanding characteristics regarding the adjustment levels of 2 groups of paroled girls are described. The one group originally had been committed as delinquents and the other group as defectives. Many of the delinquents were no brighter than the defectives. All had been away from the institutions at least 8 years. Results showed that half of the delinquents and over half of the defectives were established in the community at average or above average levels. Among those delinquents whose IQ's were similar to the IQ's of the defectives only 28% adjusted successfully as compared with 69% of the defectives. Among delinquents there was a statistically significant difference in IQ between the well-adjusted and poorly adjusted. The fecundity of the 2 groups showed that in both defectives and delinquents a considerably larger number of children are born to those adjusting unsuccessfully than to those showing successful social adjustment.—M. W. Kuensel (Children's Home, Cincinnati, O.).

4229. Kinsey, A. C. Homosexuality; criteria for a hormonal explanation of the homosexual. *J. clin. Endocrin.*, 1941, 1, 424-428.—The writer indicates certain criteria that any hormonal theory of homosexuality must meet to be acceptable. It must account for the following facts: $\frac{1}{4}$ - $\frac{1}{4}$ of all males have demonstrated their ability to respond to homosexual stimuli; there is a continuous gradation between homosexuality and heterosexuality, as well as between actives and passives; homosexual and heterosexual activity may occur within a single period in the life of an individual; the exclusively homosexual or heterosexual patterns predominating among adults develop only gradually. Several weaknesses are pointed out in experiments that have concluded that homosexuality depends upon an inherent glandular abnormality.—F. W. Finger (Brown).

4230. Kisker, G. W., & Knox, G. W. The psychosocial basis of mental disorder. *J. nerv. ment. Dis.*, 1941, 93, 731-735.—"It has been possible to trace a close relationship between early social growth and early individual growth. Both the social personality and the individual personality were originally based on conflict arising out of the necessity to solve certain problems vitally affecting the life of the organization. As a result of the inability to resolve certain of these conflicts, both society and the individual developed variant ways of reacting. The result has been the repeated expression of social and individual neuroses. It is possible to consider much of our modern social pathology, both local and international, as a neurotic group expression, the roots of which are imbedded in the social and cultural configurations which have been handed down to us from generation to generation. Similarly, the individual neurosis is an expression of the individual configurations which have been solidifying for many

million years. Both the individual and social aspect of mental variation are integral parts of our modern culture and nothing short of natural maturation processes will remove them. The dynamics may be changed and the structure may be changed, but the neurotic expression is a constant and will continue to show itself in one form or another."—M. Keller (Butler Hospital).

4231. Kounin, J. S. Experimental studies of rigidity. I. The measurement of rigidity in normal and feeble-minded persons. *Character & Pers.*, 1941, 9, 251-272.—The purpose is to validate Lewin's theory that rigidity is a positive monotonous function of age and feeble-mindedness, the latter being a subsidiary of age. Logical derivations involve: effects in the individual of change of state in one region of mental activity upon that of other regions; the extent to which the individual may be placed in an overlapping situation; the difficulty he will have in responding to a situation influenced by more than one region; the extent to which he may integrate his behavior in relation to the functioning of a large number of separate, independent regions; and the extent to which he may restructure a given field. 3 groups of subjects, old feeble-minded, young feeble-minded, and normal, equated as to Binet MA, were used in experiments the results of which indicate that the postulates are tenable.—M. O. Wilson (Oklahoma).

4232. Kounin, J. S. Experimental studies of rigidity. II. The explanatory power of the concept of rigidity as applied to feeble-mindedness. *Character & Pers.*, 1941, 9, 273-282.—Typical methods of studying the nature of psychological structure in normal and feeble-minded individuals are evaluated. In the use of standardized tests, it is assumed that test-categories represent psychological categories; this assumption is not always justified. When learning experiments are used, the results show no consistent superiority of normal subjects, that is, the normals tend to excel in abstraction and generalization, while the subnormals may excel in motor and memorizing functions. When cognitive processes are the object of study, normals are occupied with abstract and remote values and the subnormals with the immediate and concrete. There is also the question in these methods as to whether differences revealed are qualitative or quantitative. A method proposed by the author emerges from the study of psychological theory, and Lewin's theory that rigidity of functional boundaries increases with age is discussed.—M. O. Wilson (Oklahoma).

4233. Langfeldt, G. Forelesninger i psykiatri og rettspsykiatri for jurister. (Lectures in psychiatry and legal psychiatry for jurists.) Oslo: Aschehoug, 1940. Pp. 166.

4234. Lemere, F. Cortical energy production in the psychoses. *Psychosom. Med.*, 1941, 3, 152-156.—The production of electrical cortical energy is low in the schizophrenic and toxic-organic psychoses. It is increased in the affective reactions including manic-depressive psychoses and many paranoid

states. It is suggested that "schizophrenia is due to a low energy cortex secondary to a primary diencephalic inadequacy."—*P. S. de Q. Cabot* (Simmons).

4235. Lukins, N. M., & Sherman, I. C. The effect of color on the output of work of psychotic patients in occupational therapy. *Occup. Ther.*, 1941, 20, 121-125.

4236. Marquardt, M. On the nature of the neuroses. *J. Maine med. Ass.*, 1940, 31, 118 ff.—[Abstracted review; original not seen.] The nature of neurotic disturbances and the factors which complicate treatment are discussed.—*M. Keller* (Butler Hospital).

4237. Maughis, S. A concept of psychopathy and psychopathic personality: its evolution and historical development. *J. crim. Psychopath.*, 1941, 2, 329-356; 465-499.—The author discusses the development of the concept of the psychopathic personality and concludes his account with a synopsis of current views on the matter. Pinel was the first to describe cases of this sort, and he classed them under the rubric of *manie sans délire*. Individuals in this category appeared to have a normal intellect and understanding but seemed to exhibit deviations in what might be termed moral behavior. Present conceptions regarding psychopathy differ widely. Some psychiatrists regard it as a distinct mental disease; psychoanalysts believe that the psychopath is fixated at the first phallic phase of infantile behavior; while the sociological school believes that psychopathy lies outside the field of personality disorders and is a sociological, not a medical, problem. An extensive historical bibliography is appended.—*A. Chapanis* (Yale).

4238. Meredith, F. L. Hygiene: a textbook for college students on physical and mental health from personal and public aspects. (3rd ed.) Philadelphia: Blakiston, 1941. Pp. xii + 822. \$3.50.—(*Educ. Abstr.* VI: 874).

4239. Moore, M., & Gray, M. G. Alcoholism at the Boston City Hospital. *Quart. J. Stud. Alcohol*, 1941, 2, 18-34.—10,286 patients were treated for alcoholism, the ratio between sexes being approximately 18:1. About half were foreign born. Reviewed are conditions at hospitalization, conditions of those with delirium tremens, medical and surgical complications, and causes of death. Intelligence ratings on 279 men admitted to the Haymarket Square Relief Station upon the Kent oral emergency test gave a range of 9-14 years in mental age. 30% had a mental age of 13, 37% of 14 or over, and 33% of under 13. Marital status, where known, was indicative of poor adjustment.—*W. L. Wilkins* (Milwaukee, Wis.).

4240. Morgan, C., & Gould, J. Acoustical determinants of the "neurotic pattern" in rats. *Psychol. Rec.*, 1941, 4, 258-268.—An auditory stimulus has always been present in any experiments to date dealing with neurotic pattern. Experiments are reported by the writers to show that such a behavior

pattern as described by Maier depends upon the intensity and frequency of auditory stimulation. When intensity is controlled, the most effective frequencies producing seizures are supersonic. Either acoustic conditions in experiments dealing with conflict must be better controlled, or the concept itself must be reinterpreted.—*P. S. de Q. Cabot* (Simmons).

4241. Moskowitz, H. Benzedrine therapy for the mentally handicapped. *Amer. J. ment. Def.*, 1941, 45, 540-543.—"In selected cases of uncomplicated oligophrenia, prolonged administration of benzedrine sulphate raises the ability of the central nervous system of the mentally handicapped to the point where educational training can be utilized, resulting in greater performance ability. The selection of these cases may be correlated with somatic factors as body measurements and response to adrenaline injection."—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

4242. Myerson, A. Psychosomatic disorders. *War. Med.*, Chicago, 1941, 1, 404-409.—This is a general discussion for the guidance of draft-board physicians, under the headings of: normal emotional response, trouble, neurotic reaction, neurosis, principal focal psychosomatic disturbances, and clinical approach. The social history, obtained in advance, is more important than the medical examination for the discovery of these disorders. When certain signs (cardiovascular, sweating, faintness, tremor) are excessive during the examination, or on repeated examinations, they constitute a serious psychosomatic disability.—*M. E. Morse* (Baltimore, Md.).

4243. Norman, P. Some preliminary notes on mental health work for air raid victims. *Ment. Hlth, Lond.*, 1941, 2, 1-7.

4244. Ombredane, A. L'agnosie acoustique. (Acoustic agnosia). *Rev. Neurol. Psiquiat. S. Paulo*, 1941, 7, 37-55.—Verbal and musical deafness are varieties of partial central deafness, the highest functions being the first affected. Pure verbal deafness depends on bilateral lesions. The left hemisphere appears to control the integration, synchronization, and symbolic use of auditory data, impressions from the right being utilizable only through the left, across the corpus callosum. The formation of verbal or musical figures depends on rapid selection of auditory impressions, which involves differential inhibitions. This is confirmed by the EEG's of aphasics, which show deficient inhibition of Berger's waves during sensory stimulation. Psychologically speaking, the result of the lesions is decreased attention (neurologically, deficient inhibition) and neuropsychic viscosity. Perception, differentiation, and holding of impressions (evanescent oral signs, especially) are difficult, and the patient loses the connection. He cannot grasp wholes or condense long developments in an almost instantaneous intuition. He laboriously gathers the pieces, and by the time he gets one, the others are lost again.—*M. E. Morse* (Baltimore, Md.).

4245. Owen, M. B. Alternative hypotheses for the explanation of some of Faris' and Dunham's results. *Amer. J. Sociol.*, 1941, 47, 48-52.—The interpretations Faris and Dunham (see XIII: 1453) have advanced for their data on the ecological distribution of mental disorders are based on the assumption that hospitalized cases are a representative sample of all cases. A study of 275 cases of mental disorder shows that the various types of psychosis are differentially apparent in different kinds of areas. The factors which make for the selection of cases for mental hospitals are not the same in all local areas of a city. Brief comments by Faris and Dunham on Miss Owen's statement follow the article.—D. L. Glick (Brown).

4246. Pavlov, I. P. *Lectures on conditioned reflexes. Vol. II. Conditioned reflexes and psychiatry.* (Trans. & ed. by W. H. Gantt.) New York: International Publishers, 1941. Pp. 199. \$4.00.—This volume contains Pavlov's addresses and some unpublished papers from the time of his earlier books in 1928 until his death in 1936. Several of the chapters offer concise summaries of Pavlov's theory of cortical function, based on his lifetime of experimental work. Emphasis is placed on the different types of nervous system, and considerable attention is devoted to subcortical (motivational) processes, to the influence of strong stimuli, and to fine discrimination in precipitating the breakdown of normal functions. The greater part of the book is concerned with the application of conditioning theory to the problems of psychiatry. The author presents analogs from experimental results for the mechanisms of hypnosis and dissociation, neurasthenia, hysteria, catalepsy, stereotypy, and negativism. The functional isolation of points of the cortex, the pathological inertness of the excitatory process, and the ultraparadoxical phase are the principal concepts upon which the objective and behavioristic psychopathology is constructed.—D. G. Marquis (Yale).

4247. Porter, W. C. *Military psychiatry and the selective service.* *War Med.*, Chicago, 1941, 1, 364-371.—Porter discusses the psychological stresses associated with induction, the reactions of different abnormal types to military life, and outlines the procedures of the Army and Veterans' Bureau with neuropsychiatric cases. The strains of induction include loosening of home ties, regimentation, anticipation neurosis, and conflict over being taught to kill, which may produce a katatonic or psychoneurotic state. The manifestations of mental disease differ in the soldier and the civilian. The break may be caused by responsibilities due to promotion, experiences tinged with suggestions or threats, and the enemy's exploitation of fear. The results may be retreat to alcohol, an anxiety state, or self-condemnation. The psychopath is disliked by other soldiers, weakens discipline, is liable to sexual seductions, and may develop apparent katatonic stupor when coerced. The aggressive psychopath often does well while the army is advancing but stands retreat, teamwork, and monotony poorly.

Introverts are a liability. Hypomanics may do distinguished work by themselves but are liable to accidents and charges of insubordination. In general, neither hypomanics nor psychopaths should be accepted.—M. E. Morse (Baltimore, Md.).

4248. Porteus, S. D., Hunter, M., & Herrick, C. J. *The practice of clinical psychology.* New York: American Book, 1941. Pp. vii + 579. \$3.25.—This book represents the first author's own practical experience as a clinical psychologist over a period of 27 years. The general field is surveyed. Topics discussed include a survey of clinical problems and methods, the nature of intelligence and a comparison of the old and new revisions of the Binet, performance tests and measures of social capacity and personality, delinquency and its predisposing conditions, the criminal, the dull and the backward child, the diagnosis of reading disabilities, psychoanalysis and psychology, clinical service and relationships. Special supplementary tests are dealt with in a separate chapter, and a Social Rating Scale for Nurses is included in the chapter on vocational guidance.—P. S. de Q. Cabot (Simmons).

4249. Ray, B. S., & Wolff, H. G. *Experimental studies on headache: pain-sensitive structures of the head.* *Arch. Surg., Chicago*, 1940, 41, 813-856.—[Abstracted review; original not seen.] The sensitivity to pain of tissues covering the cranium, the cranium itself, and most of the intracranial structures was determined in 45 patients during operations on the brain. From the data available 6 basic mechanisms of headache have been formulated: "(1) traction on the veins that pass to the venous sinuses from the surface of the brain and displacement of the great venous sinuses; (2) traction on the middle meningeal arteries; (3) traction on the large arteries at the base of the brain and their main branches; (4) distention and dilatation of intracranial and extracranial arteries; (5) inflammation in or about any of the pain-sensitive structures of the head, and (6) direct pressure by tumors on the cranial and cervical nerves containing many pain-afferent fibers from the head."—M. Keller (Butler Hospital).

4250. Rosenzweig, S., & Hoskins, R. G. A note on the ineffectualness of sex-hormone medication in a case of pronounced homosexuality. *Psychosom. Med.*, 1941, 3, 87-89.—A patient with a 35 year history of homosexuality was given sex hormone medication for a 6 months period. No noticeable influence on his behavior or personality was detected.—P. S. de Q. Cabot (Simmons).

4251. Sacks, J., Maier, N. R. F., & Glaser, N. M. The influence of metrazol on the "neurotic pattern" in rats. *J. Pharmacol.*, 1941, 72, 33-34.—The neurotic pattern consists of a period of violent aimless running, which may be followed by a convulsion. Several investigators have produced it by auditory stimuli. The incidence of reactors varies from 20-60% in different strains, and some refractory rats can be made to react by introduction of other psychological stimuli. The purpose of the

present experiments was to determine whether the reaction is a hereditary trait present only in certain strains, or is latent in all. This was done by exposing refractory animals to auditory stimuli after a sub-convulsive dose of metrazol. The reaction can be thus produced in the majority of nonreactors. The behavior resembles that after auditory or other psychological stimuli and differs from convulsions produced by larger doses of metrazol. The percentage of reactors is increased much more by metrazol than by purely psychological measures. The neurotic pattern evidently cannot be completely accounted for on the basis of heredity.—*M. E. Morse* (Baltimore, Md.).

4252. Sargant, W. The hyperventilation syndrome. *Lancet*, 1940, 238, 314-316.—The hyperventilation syndrome is a psychosomatic condition "very prevalent in the services during the last war and likely to increase again in this." The patients, "under varying war stresses, complain of palpitation and breathlessness which are not related to any demonstrable organic lesion of the heart. . . . Many patients complain of a sense of constriction in the chest or of difficulty in getting their breath. . . . To relieve these feelings they sigh excessively or breathe rapidly. As a result they consciously or unconsciously hyperventilate; in the severer cases this produces a gaseous alkalosis. Hyperventilation may precipitate a variety of 'functional' symptoms, such as head sensations, bodily weakness or collapse, dizziness, fainting, besides hyperventilation tetany. . . . Either psychotherapy or sedation should be used to relieve the anxiety producing the attack, or various measures should be tried to combat either the hyperventilation or the gaseous alkalosis resulting from it."—*C. K. Trueblood* (Cambridge, Mass.).

4253. Schatia, V. The incidence of neurosis in cases of bronchial asthma as determined by the Rorschach test with psychiatric examination. *Psychosom. Med.*, 1941, 3, 157-169.—An interpretation of the Rorschach psychograms of 40 asthmatic patients shows that "asthmatics tend to have compulsive personalities without evidence of phobias or compulsions." This confirms impressions based on psychoanalytic methods.—*P. S. de Q. Cabot* (Simmons).

4254. Simon, A., Hagan, M., & Hall, R. W. A study of specific data in the lives of 183 veterans admitted to St. Elizabeth's Hospital. *War Med.*, Chicago, 1941, 1, 391-399.—In order to obtain data of help to the draft boards in determining the advisability of induction, a survey was made of the above-mentioned men from the Army, Navy, Marine Corps, and Coast Guard, admitted in 1940, whose ages were comparable to those of selectees. 42% of these men broke down mentally within the first 6 months of service; 10.3% had been in mental hospitals; 8.3% had been in a detention home or training school; 19.4% had used alcohol to excess; 6.6% were morons; 33.9% had a history of psychosis in one or more members of the immediate family;

and 37.3% came from broken homes.—*M. E. Morse* (Baltimore, Md.).

4255. Sprague, G. S. The psychopathology of psychopathic personalities. *J. nerv. ment. Dis.*, 1941, 94, 193-201.—Abstract and discussion.

4256. Strauss, A. A. The incidence of central nervous system involvement in higher grade moron children. *Amer. J. ment. Def.*, 1941, 45, 548-554.—A short method for the neurological examination of mental defectives is presented. Valuable neurological signs for the diagnosis of a lesion in the central nervous system are pointed out. The results of a neurological study of 167 unselected moron and borderline children are presented with the enumeration of central nervous system involvement in relation to different clinical types of mental defect.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

4257. Strecker, E. A. Chronic alcoholism; a psychological survey. *Quart. J. Stud. Alcohol*, 1941, 2, 12-17.—Principles of the psychopathology of alcoholism are outlined: the alcoholic is likely to be an introvert; alcoholism is one of the psychoneuroses of introversion; it is a neurosis of emotional immaturity. Therapy must be objective and unemotional, and the alcoholic must accept a completely non-alcoholic future.—*W. L. Wilkins* (Milwaukee, Wis.).

4258. Stungo, E. Evipan hypnosis in psychiatric outpatients. *Lancet*, 1941, 240, 507-509.—The author describes a technique by which evipan sodium and other barbiturates can be safely used to induce pre-anesthetic states in psychiatric outpatients for the purpose of investigating cases of suspected neurosis in which no obvious psychogenic factor has been discovered or elicited by other methods. "The patient, released from inhibition, may discuss items, incidents, or reactions, which in normal consciousness were denied, suppressed, distorted, or evaded. . . . Should the psychogenesis become apparent, the hypnotic state induced by evipan is useful for treatment. Synthesis and interpretation may be attempted during the pre-anesthetic or post-hypnotic phases depending on the reaction of the patient to the drug."—*C. K. Trueblood* (Cambridge, Mass.).

4259. Symonds, C. P. The neurological approach to mental disorder. *Lancet*, 1941, 240, 337-340.—"There is no justification whatever for psychotherapy as a special branch of medicine. . . . Any man who has the qualities of a good doctor can become a sound psychotherapist. . . . How far, and how long psychology will maintain its claim to be a separate branch of medicine will depend upon the readiness of neurologists and psychiatrists to acknowledge that, as brain really is the organ of mind, there subject is one and indivisible. . . . The fruits of recent research have emphasized common interest, for example, the work of Bard and others on hypothalamic function, the contribution of the biochemists to the understanding of brain metabolism, the study of cortical rhythm by the electroencephalogram, the lessons of continuous narcosis and convulsive therapy. Looking to the future . . .

the merging of the two specialties is not only desirable but inevitable."—C. K. Trueblood (Cambridge, Mass.).

4260. Taylor, S. **The psychopathic tenth.** *Lancet*, 1941, 240, 321-323.—The author holds that the terms neurosis and neurotic are clumsy and misleading and proposes instead psychopathy and psychopathic. He points out that in German psychiatry it has been customary for a decade to include neuroses under the head of psychopathic personality. The psychopathic include about a tenth of the population. "(1) A psychopathic illness is an abnormality of the mind sufficient to make its possessor a nuisance to himself or other people. . . . (2) A psychotic illness is an abnormality of the mind sufficient to make its possessor a danger to himself or other people. . . ." The great majority of the psychopathic "are the weaker brethren who have started life with only half a talent. . . . In times of trouble the uniformity of their behavior makes many of us see them for the first time as a coherent group. . . ."—C. K. Trueblood (Cambridge, Mass.).

4261. Tournier, P. **Médecine de la personne.** (Medicine of the personality.) Neuchâtel: Delachaux & Niestlé, 1940. Pp. 293. Fra. 5.—[Abstracted review; original not seen.] The special quality of Tournier's book derives from 2 personal convictions: that a man is sound if he can accept his life obediently and fully according to his allotted tasks; and that every disease offers the possibility of a personal transformation and new attainment. Most diseases represent flight or refusal. Special topics are: directing one's life according to one's temperament; economy of energies; psychic factors in infectious diseases; and conflicts and their conquest in somatic diseases.—M. E. Morse (Baltimore, Md.).

4262. Vaccaro, L. **Traumatic injuries and mental disturbances.** *Industr. Med.*, 1941, 10, 187-189.—A controversy exists over the relation of head injury to subsequent mental disease. Within a year after the accident a syndrome may develop consisting of delirium with excitement or depression, fixed ideas, and rapid dementia, and death may ensue. The acute stage may be preceded by a change of personality, restlessness, and confusion. Alcoholism or a pre-existing abnormal mental condition must be excluded. Violence to the body, and particularly the head, is liable to bring out a latent psychopathic status. This is often ignored by compensation courts, and if the mental symptoms occur 5 or more years after the injury, the relationship is very difficult to establish. The functional disturbances produced by head trauma (headache, tinnitus, etc.) may be so disquieting as to lead, in themselves, to some form of mental disorder.—M. E. Morse (Baltimore, Md.).

4263. Weithrecht, H. J. **Die allgemeine Psychopathologie im Jahre 1939.** (General psychopathology in 1939.) *Fortschr. Neurol. Psychiat.*, 1941, 13, 100-122, 123-141.—General books on the subject by

Rohracher, Carl Schneider, Zucker, and Kolle are reviewed first. Topics covered by the various publications are sensation and perception, ideation and thought, feeling and value, drive and will, self-awareness, temporal awareness, attention, intelligence, and personality. Bibliography.—D. S. Oberlin (Delaware State Hospital).

4264. Winkelman, N. W., & Moore, M. T. **Allergy and nervous disease.** *J. nerv. ment. Dis.*, 1941, 93, 736-749.—A review of the literature shows the increasing emphasis placed on allergy in the etiology of nervous and mental disorders. Cases are presented of migraine, epilepsy, and focal lesions of the brain where the clinical picture was best explained on an allergic basis.—M. Keller (Butler Hospital).

4265. Wittkower, E., Rodger, T. F., & Wilson, A. T. M. **Effort syndrome.** *Lancet*, 1941, 240, 531-535.—The authors discuss the literature on effort syndrome and present a summary of biographical studies of 50 soldiers exhibiting the essential characteristics of the disorder, namely, "Disproportionate breathlessness and fatigue on effort, and a varying degree of undue disturbance of the pulse-rate on exercise (abnormal exercise-tolerance test)." The patients were classified into the following 5 groups, according to personality type: (1) the George Washington-Calvin-Quaker type (20 soldiers), characterized by a keen sense of duty, rigid morality, severe repression of aggressiveness, whose difficulties arise from "fear of showing fear"; (2) the resigned grouseers (11 soldiers) who resemble group 1 but are less repressed in their aggressiveness; (3) the open rebels (3 soldiers), like the others but overtly overaggressive; (4) men with inferior physique against which they struggled in vain (12 soldiers); (5) the hysterical quitters (4 soldiers). Treatment of each group is discussed. It is concluded that effort syndrome occurs in "individuals of unduly high and severe self-regard, and the importance of repressed aggression in most of the patients is emphasized."—C. K. Trueblood (Cambridge, Mass.).

4266. Wittkower, E., & Spillane, J. P. **Neuroses in war.** *Brit. med. J.*, 1940, Part 1, 308-310.—Methods of preventing and handling war neuroses in the military service are discussed in the light of experience during the war of 1914-18.—D. A. Grant (Wisconsin).

4267. Wulfeck, W. H. **Motor function in the mentally disordered. Part I. A comparative investigation of motor function in psychotics, psychoneurotics and normals.** *Psychol. Rec.*, 1941, 4, 271-323.—25 adult psychoneurotics, 23 schizophrenics, and 25 manic-depressives were equated as nearly as possible with a control group of 20 normal subjects. 7 different tests of motor function were used. Results were: (1) Schizophrenics showed wider differences of level of attainment than the other groups, especially in tests involving speed of movement. (2) Manics performed at higher speed levels and tended to make more errors than others.

(3) Unlike the manics, the depressives did not show high perseverational tendencies; they reflected general psychomotor retardation. (4) The performances of the psychoneurotics were similar to those of the normals. (5) The speed of adjustment of the schizophrenics was most markedly affected. For experimental purposes the manic phase should be classified separately from the depressive one and motor tests of the type used in this investigation be used to distinguish between the types here studied whenever the diagnosis is difficult.—P. S. de Q. Cabot (Simmons).

4268. Wulfeck, W. H. Motor function in the mentally disordered. Part II. The relation of muscle tension to the performance of motor tasks. *Psychol. Rec.*, 1941, 4, 326-348.—Tension measures taken from groups of manic-depressive, schizophrenics, psychoneurotic, and normal adults were studied with the following results: (1) all groups showed greater tension with the more difficult motor coordinations; (2) the patterns of the manics and the depressives were similar; (3) manic-depressives showed more tension than normals but less than the schizophrenics; (4) schizophrenics recorded a more constant increase in tension from one experimental session to another than did all other groups; (5) psychoneurotics were no different from the normals in expressed tension; (6) tension appears to be a function of the complexity of the responses demanded by the environment.—P. S. de Q. Cabot (Simmons).

4269. Zilboorg, G. Ambulatory schizophrenias. *J. nerv. ment. Dis.*, 1941, 94, 201-204.—Abstract and discussion.

4270. Zubin, J., & Scholz, G. C. Negro mental defectives and epileptics in institutions in eighteen southern states and the District of Columbia, 1938. *Amer. J. ment. Def.*, 1941, 45, 617-623.—"The white and negro rates for hospitalized and institutionalized mental deficiency and epilepsy have been examined in 19 southern states. Positive correlations were obtained between negro rates and white rates for these 19 states. The negro rates varied inversely as the proportion of negroes in the general population. The 19 states divided themselves into 3 regional groupings: The Border States, Middle States and the Deep South. The negro rates declined from north to south and the ratio of negro to white rates also declined along the same gradient." Implications of these findings are briefly discussed.—M. W. Kuenzel (Children's Home, Cincinnati, O.).

[See also abstracts 4107, 4110, 4143, 4167, 4171, 4200, 4272, 4319, 4322, 4323, 4325, 4378, 4380, 4430, 4434, 4436, 4445, 4452, 4465, 4469, 4471.]

PERSONALITY AND CHARACTER

4271. Adams, C. R. A new measure of personality. *J. appl. Psychol.*, 1941, 25, 141-151.—Inasmuch as most personality tests depend upon complete cooperation of the testee in order to obtain valid results, their use in the selection of new em-

ployees is distinctly limited. To meet this situation, an instrument measuring several different personality traits was devised. It consists of 9 parts, none of which has a reliability less than .90. Preliminary evidence, primarily clinical, is offered relative to validity.—E. E. Ghiselli (California).

4272. [Anon.] A psychiatrist looks at Hitler. *Lancet*, 1940, 238, 44-47.—The writer diagnoses Hitler as a hysterical personality in Kraepelin's meaning of the term and lists characteristics of Hitler which accord with the Kraepelinian specifications. The diagnosis of Hitler as a paranoiac, made by American psychiatrists, is opposed on the ground that no one can be sure that Hitler's persecutory ideas are really delusional. "I do not know," says the author, "of a psychiatric illness in which delusional ideas are so well adapted to the actual needs of the political situation, of propaganda, and so well formulated for incitement of the masses. . . . There is no delusional system, nothing fixed, but everything pliable and topical."—C. K. Trueblood (Cambridge, Mass.).

4273. Baumgarten-Tramer, F. Zur Psychologie des Verstehens und der Verständigung. (The psychology of understanding and of mutual understanding.) *Gesundh. u. Wohlf.*, 1941, No. 2, 61-64.—Understanding of another's personality may be reached through one's own experience; intuitively, through a special gift; and through a general knowledge of character. Knowledge of underlying motives does not necessarily change understanding into sympathetic insight. Appreciation arises from good will and the value factor implicit in sympathy. Value makes the difference in feeling; if ideologies conflict, acceptance and appreciation are impossible, notwithstanding exhortations to sympathy. Understanding and appreciation are the chief bases of social feeling, individual, national, and racial. "To understand all is to forgive all" has a high social meaning, but it sometimes becomes a catch phrase.—M. E. Morse (Baltimore, Md.).

4274. Brugger, H. Contribución al problema del conocimiento del hombre. (Contribution to the problem of the knowledge of man.) *An. Inst. Psicol. B. Aires*, 1941, 3, 484-497.—4 general groups interest themselves in sizing up persons: the naive (waiters, etc.); those whose work requires a quick decision (personnel managers, etc.); educated people interested in reading up on psychology; and those with true scientific curiosity and discrimination. By using a questionnaire designed to determine the processes by which personality estimates are arrived at, Brugger found that all groups relied on a schema of signs, the significance of which derived from the particular viewpoints, experiences, and purposes of each group. The judgments of group 1 are based on few signs; utilize suggestion and situations; and are often unconscious, confused, uncritical, and vague. Those of group 2 are drawn from practical experience and crystallize into formulas. Group 4 uses many and exact signs and stresses intellect rather than emotion. Nevertheless, a com-

- mon trait unites these groups: the wish to understand man and a special aptitude for appreciation and judgment. No amount of study can replace native inclination, sensitivity, and recognition of the profound vibrations between man and man.—*M. E. Morse* (Baltimore, Md.).
4275. Crider, B. The reliability and validity of two graphologists. *J. appl. Psychol.*, 1941, 25, 323-325.—Two graphologists ranked 18 young adults on 16 traits on the basis of samples of their handwriting. The correlations between these rankings and scores on objective tests measuring the same traits averaged .15 for one graphologist and .27 for the other.—*E. E. Ghiselli* (California).
4276. Delgado, H. La formación espiritual del individuo. (The spiritual formation of the individual.) (2nd ed.) Lima: Club Autores y Lectores, 1940. Pp. 212.—[Abstracted review; original not seen.] This book deals with the life curve of man in society referring to Freud, Jung, Adler, and phenomenology. Practical applications to education and mental hygiene are given.—*M. E. Morse* (Baltimore, Md.).
4277. Hanfmann, E. A study of personal patterns in an intellectual performance. *Character & Pers.*, 1941, 9, 315-325.—Since in such a unified whole as personality no part is isolated from another part, it is assumed that qualitative differences in one sphere, such as an intellectual performance, reflect differences in personality. The procedure of this study called for the classification of blocks of different sizes, shapes, and colors (Vigotsky test) on the basis of size of top area and height. Results show that the subjects could be grouped according to whether their approach was of a conceptual (thinking), or of a perceptual nature. Furthermore, they could be grouped as to whether the 2 approaches, when the 2 were used, worked together (were concordant) or were antagonistic (discordant). Women tended to fall into the perceptual and men into the conceptual group. Subjects with the Ph.D. or M.D. degree tended more to use the conceptual, those with the M.A. degree, the perceptual approach. In neither of these groupings, by sex or by level of higher degree, however, was there any association with the concordance-discordance variable. Several outstanding research workers among the subjects fell almost wholly within the conceptual-concordant subgroup.—*M. O. Wilson* (Oklahoma).
4278. Lorge, I., & Thorndike, E. L. The value of the responses in a completion test as indications of personal traits. *J. appl. Psychol.*, 1941, 25, 191-199.—"The verbal replies in association and completion tests are largely unrelated to the real behavior of the person toward things, people, animals, art, music, beauty, responsibility, etc. The person may be largely influenced by special symbolic and verbal habits. Everything that a person does is revealing, but these verbal replies may reveal relatively little about a person's probable behavior toward real things, events, and relations."—*E. E. Ghiselli* (California).
4279. Lorge, I., & Thorndike, E. L. The value of the responses in a free-association test as indicators of personal traits. *J. appl. Psychol.*, 1941, 25, 200-201.—The reliability of responses in a free-association test is found to be quite low. The validity of such tests as indicators of personal traits, therefore, is doubtful.—*E. E. Ghiselli* (California).
4280. Marshall, W. Comments on personality, unconditioning and frustration. *Med. Times, N. Y.*, 1941, 69, 106-117, 124.
4281. Middleton, W. C. The ability of untrained subjects to judge intelligence and age from handwriting samples. *J. appl. Psychol.*, 1941, 25, 331-340.—Untrained judges cannot predict intelligence from handwriting and can predict age only slightly better than chance. The reliability of such judges' estimates of these 2 characteristics is relatively low.—*E. E. Ghiselli* (California).
4282. Musgrave, R. S., & Allport, F. H. Teleonomic description in the study of behavior. *Character & Pers.*, 1941, 9, 326-343.—The assumption underlying this study, presented earlier (see XI: 3305), is that the trend of the individual's behavior can be described teleonomically, or in terms of the purpose he seems to be carrying out. The present study is concerned with the problem of describing behavior by this approach. 3 short motion picture films for practice sessions and one longer experimental film were presented, each one showing a variety of acts. The observers were divided into 2 groups, a practice group of 25 non-psychology undergraduates and a non-practice group of 25 psychology undergraduates. The former were given rather thorough training in the method of teleonomic description. Aside from giving a full description of the technique, the report reveals 2 facts. (1) Observer agreement is raised to some extent by practice, but is still low. (2) No observers describe all acts, and some describe many more than others. Therefore, observer agreement is an inadequate criterion of observer reliability, except in the case of the best observers. The method is valuable in training observers, in selecting the most promising observers, and in obtaining measures of efficiency of observers.—*M. O. Wilson* (Oklahoma).
4283. Pulver, M. Symbolik der Handschrift. (Symbolism of handwriting.) (3rd ed.) Zürich & Leipzig: Füssli, 1940. Pp. 315. RM 9.—[Abstracted review; original not seen.] Pulver's special contribution is the application of psychoanalytical principles (in the wider sense) to graphology. He rejects Klages' theory and adopts the principle of plurality and multiple stratification of graphological characteristics, the meanings of which are determined by the whole.—*M. E. Morse* (Baltimore, Md.).
4284. Székely, B. Teoría y práctica del "psico-diagnóstico de Rorschach." (Theory and application of "Rorschach's psychodiagnostics.") *An. Inst. Psicol. B. Aires*, 1941, 3, 429-481.—Székely, who introduced Rorschach's test into Latin America,

here reviews his 28 years of experience. He describes the method and the interpretation of results, both according to his own experience and that of other investigators, and stresses the growing importance of the test in psychoanalysis, psychiatry, general medicine, education, vocational guidance, typology, characterology, ethnology, and criminology. The greatest value of the test is as an orientation in regard to tendencies and, in psychiatry, as a guide to prognosis and a check-up on treatment. It is a "human radiograph," giving a total picture of the personality and its attitude toward the environment and discovering signs (particularly in latent schizophrenia) which usually escape notice. Complete Spanish and Latin-American bibliography.—*M. E. Morse* (Baltimore, Md.).

4285. Thomson, W. A. An inventory for measuring socialization-self-seeking and its relationship to the Study of Values test, the ACE Psychological Examination, and the Strong Vocational Interest Blank. *J. appl. Psychol.*, 1941, 25, 202-212.—Scores on an inventory designed to measure the trait of socialization-self-interest were found to be correlated with scores on the economic and political values scales of the Allport-Vernon Study of Values test, scores on an intelligence test, and with the degree of interest in people as measured by the Strong Vocational Interest Blank.—*E. E. Ghiselli* (California).

[See also abstracts 4184, 4188, 4247, 4253, 4326, 4345, 4390, 4412.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

4286. [Anon.] Higher degrees in sociology conferred in 1940. *Amer. J. Sociol.*, 1941, 47, 70-81.—This is a list of persons given degrees, with the titles of dissertations and theses and institutions conferring the degrees. The list includes some 25 titles in the field of social psychology.—*D. L. Glick* (Brown).

4287. [Anon.] Students' dissertations in sociology. *Amer. J. Sociol.*, 1941, 47, 82-96.—This is a list of doctoral dissertations and masters' theses in preparation in universities and colleges in the United States and Canada, compiled from returns to letters sent by the *Journal* to departments of sociology. Of some 300 titles about 35 appear to be of direct social-psychological interest.—*D. L. Glick* (Brown).

4288. Benson & Benson, Inc. Here's what the boys in the army think. *McCall's*, 1941, 63, No. 10, 22-23; 32.—This reports the results of a survey conducted in April, 1941, in army camps in 26 states. Respondents were: selectees 47%; regulars 33%; national guard 20%. There were 13 questions on sending army abroad, where the army might fight, getting a date, living quarters, discipline, placement according to fitness, etc. In answer to:

"Do you think the United States will send an army abroad to fight before the present war is over?" 59% said yes. One-fourth were undecided.—*A. Thomsen* (Elmo Roper, Market Research).

4289. Bernard, J. Normative collective behavior: a classification of societal norms. *Amer. J. Sociol.*, 1941, 47, 24-38.—To the 4 factors offered by F. H. Allport as explaining the shape of conformity curves, the present article adds a fifth, namely, the nature of the norm regulating the conformity behavior. Some norms are stated in such a way that overconformity is impossible; other norms, however, are stated in such a way that overconformity is possible. The J-curve is characteristic in situations where overconformity is impossible and where the norm is not too difficult for most persons. In other situations skewed normal curves may be expected. For purposes of measuring conformity behavior a classification of societal norms based on the susceptibility to measurement of deviations from the norms is presented. Suggestions with respect to measuring techniques are also presented.—*D. L. Glick* (Brown).

4290. Bierens de Haan, J. Gemeenschap en maatschappij. (Community and society.) Haarlem: Willink & Zoon, 1939. Pp. 319.—(*Philos. Abstr.*, 1941, No. 5/6, 46).

4291. Burgess, E. W. Human relations begin in the home. *J. Home Econ.*, 1941, 33, 8-13.—(*Educ. Abstr.* VI: 710).

4292. Cuatrecasas, J. Ensayo crítico sobre el "hombre masa." (Critical essay on the "mass man.") *An. Inst. Psicol. B. Aires*, 1941, 3, 409-427.—This is an examination of technology and modern man, standardization, and collective emotions. The man standardized by manual technics is today the dominant type; notwithstanding external uniformity, free use of technics with education and individual liberty develops personality. The standardized man who has acquired social power has succeeded the anonymous, spiritually poor, illiterate worker of the past. The change is due to specialization of work, protective association, and assimilation of material enjoyments. Collective emotion is normally coincident, partial, and transient; its danger lies in calculated, exclusive utilization of a single manifestation as obligatory and designed to form warped mentalities of a pre-established pattern. The modern slave is the man subjected to combined propaganda and militarism or to imposition of an ideology by an employer. Necessary for a collective personality are neologisms, fear, and collective myths arousing unsatisfied or warped passions and making culture serve the whole. This is the paradoxical moment in evolution when part of the race is employed in denying man's evolutionary complexity—a transient reaction to the question of human destiny created by technological progress. The problem is to release man from subjection to man.—*M. E. Morse* (Baltimore, Md.).

4293. Cuber, J. F., & Pell, B. A method for studying moral judgments relating to the family.

Amer. J. Sociol., 1941, 47, 12-23.—This paper proposes an alternative method to the use of the opinion poll by which informants are requested to indicate their reactions to general and conceptual statements. A situational and nonconceptualized questionnaire dealing with moral evaluations relating to the family and marriage was constructed and submitted to 217 college students. The results are summarized, and the procedure is evaluated.—D. L. Glick (Brown).

4294. Elkin, A. P. *Society, the individual and change: with special reference to war and other present-day problems*. Sydney, Australia: Robert Dey, 1941. Pp. 41.

4295. Emme, E. E. *Factors in the religious development of thirty-eight college students*. *Relig. Educ.*, 1941, 36, 116-120.—Data on the religious development of 38 college students were obtained from autobiographies, check lists, and the Thurstone-Chave test on attitudes toward the church. The chief conclusions were: (1) the Sunday school teacher had the greatest influence on conceptions of God, heaven, hell, and the devil; (2) childhood religious experiences definitely influenced religious attitudes, and college experiences and acquaintance with science changed these very little; (3) the students have a favorable attitude toward the church and do not consider the college chapel a substitute for Sunday church.—F. A. Mote, Jr. (Connecticut).

4296. Gilbert, G. M. "Aptitude" and training: a suggested restandardization of the K-D music test norms. *J. appl. Psychol.*, 1941, 25, 326-330.—Aptitude cannot be considered independent of training and therefore should be taken into account either in the construction of the test by eliminating those parts which are unduly susceptible to training, or in setting up separate norms for trained and untrained individuals. Norms for the Kwalwasser-Dykema music test are presented for trained and untrained subjects and for the battery with those tests eliminated whose scores are most affected by training.—E. E. Ghiselli (California).

4297. Gross, B., & Seashore, R. H. *Psychological characteristics of student and professional musical composers*. *J. appl. Psychol.*, 1941, 25, 159-170.—A comparison of 10 poor students of musical composition with 10 good students and 10 well known American composers indicated that superiority in composition is associated with a superiority in vocabulary, auditory discrimination, informal and formal musical training, and work methods of composition and with the cycloid component of temperament.—E. E. Ghiselli (California).

4298. Hartmann, G. W. VI. *Frustration phenomena in the social and political sphere*. *Psychol. Rev.*, 1941, 48, 362-363.—Not enough consideration has been given to the manner in which different cultures make provision for accommodating themselves to the post-frustration behavior of 'balked' individuals or for adjusting those individuals to their own unsatisfying state. Some examples are given. Most attempts at social reconstruction are efforts to

reduce the amount of frustration in group life.—A. G. Bills (Cincinnati).

4299. Hughes, T. H. *The psychology of preaching and pastoral work*. New York: Macmillan, 1941. Pp. 266. \$2.25.—The basic principles of the new psychology (chiefly dynamic and psychoanalytic) are presented briefly in an introductory chapter. In the 8 chapters following, these principles are applied to the problems of preaching, of pastoral care, and of the minister himself. Although some indication of methods of treatment is given, the book is not designed to prepare the minister for the practice of psychoanalysis and therapy.—R. B. W. Hutt (Trinity).

4300. Ingram, K. *Sex-morality to-morrow*. London: Allen & Unwin, 1940. Pp. 175. 6 s.—[Abstracted review; original not seen.] Love will be the only test of sexual morality, with only promiscuity and excess open to criticism in the future predicted by this treatment of sex morality in isolation from morality in general.—W. L. Wilkins (Milwaukee, Wis.).

4301. Israeli, N. *The psychology of planning*. *Psychol. Rev.*, 1941, 4, 254-256.—Basic factors of planning are treated under the headings: thinking, prediction, personnel; short and long term planning; personal, national, international, and technological planning; types of planning.—P. S. de Q. Cabot (Simmons).

4302. Jenkins, J. G. *Characteristics of the question as determinants of dependability*. *J. consult. Psychol.*, 1941, 5, 164-169.—4 major ways in which questions may reduce the dependability of answers are: (1) predetermination of the answer by leading and loaded questions, by forcing the answer into unwarranted categories, and by an improper order of questions; (2) failure to determine sufficiently the direction of response due to the use of vague questions, ambiguous terms, and a failure to pretest for tacit assumptions and to provide for homogeneous response categories; (3) exceeding the ability of the respondent by the use of words not understood by the whole sampling and of complex questions or by failing to help the respondent to remember and to express himself; (4) inviting inaccurate responses.—P. S. de Q. Cabot (Simmons).

4303. Maliutine, E. N. *Comparaison de l'état de l'appareil vocal chez les chanteurs des différentes nationalités*. (Comparison of the state of the vocal apparatus in singers of different nationalities.) *Acta oto-laryng.*, Stockh., 1941, 29, 20-35.—The comparison was made between members of 10 different tribes of Asiatic Russia (Tatars, Kal-moucks, etc.), who had come to study music and dramatics in the conservatory of Moscow. Attention was given to the consistency of the arch of the palate, the structure of the arytenoides, the geometrical form of the vocal cords, the manner of their vibration, etc.—in short the entire peripheral vocal apparatus. Though differing very much from Europeans in respect to their racial characteristics,

these Asiatic representatives showed no special characteristics of the vocal organs to account for the special (forced guttural) character of their national style of singing and, under correct direction, were able to learn to execute the European repertory without forgetting their national style of singing.—*E. M. Pilpel* (New York City).

4304. **Mock, J. R., & Larson, C.** *Morale—the soul of the army.* *Front. Democracy*, 1941, 7, 237-239.—A description of the origin and organizational structure of the newly instituted morale branch of the general staff of the army.—*S. S. Sargent* (Barnard).

4305. **Myers, C. S.** *The uses of psychology in war-time.* *Nature, Lond.*, 1941, 147, 564-566.—This is a brief description, with examples, of the contribution of psychology in the fields of medical psychology, aviation medicine, vocational guidance, selection and training, working conditions, and social conditions.—*N. R. Bartlett* (Brown).

4306. **Osgood, C. E., & Stagner, R.** *Analysis of a prestige frame of reference by a gradient technique.* *J. appl. Psychol.*, 1941, 25, 275-290.—A method for analyzing a frame of reference is presented wherein the subject rates a group of occupational stereotypes on a series of continua, the ends of which are defined in terms of the psychological opposites of these continua. Using this technique, it was found that "decisions about the characteristics of occupational stereotypes tend to conform closely to a framework which is based on the relative prestige of the occupations."—*E. E. Ghiselli* (California).

4307. **Perry, R. B.** *The meaning of morale.* *Educ. Rec.*, 1941, 22, 446-460.—Morale is best described as the opposite of discouragement. Its causes are: (1) physical, based on adaptation to conditions affecting bodily well-being; (2) psychological, the control of instinctive and emotional reactions; (3) creedal, the facilitating effect of specific beliefs; and (4) rational, the support of these beliefs by reason. Each of these is illustrated by the part it played in the downfall of France. Democracies being peculiarly vulnerable to internal dissension, our morale must be maintained particularly by revivifying our common creed and by definite steps to reconcile the diverse interests among us.—*F. C. Paschal* (Vanderbilt).

4308. **Schoen, M.** *Aesthetic experience in the light of current psychology.* *J. Aesthet.*, 1941, 1, 23-33.—Common experience develops by processes of differentiation and adjustment or interpretation. Aesthetic experience arises "by an act of imagination in which experience is rid of that which is imposed upon it by biological necessity in interpretation, so that what is left is the world of differentiation, or a world of forms." It is an "absorption in the object of experience, as contrasted with practical experience, in which interest is centered on . . . seeking satisfaction through the object of experience." Each of the prominent aesthetic theories stresses but one aspect of aesthetic experience; some stress the nature of the experience itself, others stress what

the experience is experience of, and some stress what the experience does to the experient. "To the first class belong the theories of intrinsicality, disinterestedness, and objectification; to the second the theories of significant form and intuition; and to the third those of physical distance, aesthetic repose, and catharsis."—*J. T. Cowles* (Illinois).

4309. **Sierra, A. M.** *La penetración sociológica en la psicología.* (The penetration of sociology into psychology.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 377-390.—This is a review of the controversy as to whether the social is independent of the individual and external to the individual consciousness. The treatise is devoted largely to the arguments of Dürkheim, whose originality lay in seeing the social as a state of consciousness existing in the individual in incomplete form, common to each member of the group, but in the group as a reality transcending any one member and cementing all psychic life. Sierra discusses the logical structure of the social (immutability, universality, and impersonality of concepts and categories); the social origin of religion; and the religiosocial as the source of science, logic, and ethics. The extreme limit of this thesis is that the action of the social has conditioned the functions of the cerebral mechanisms and made the brain exquisitely sensitive to manifestations of collectivity. Psychosociology is not complementary to psychology but aspires to furnish the exclusive rational explanation of how the individual mental life is built up and animated.—*M. E. Morse* (Baltimore, Md.).

4310. **Sutherland, I. L. G.** [Ed.] *The Maori today.* Wellington: New Zealand Institute of International Affairs & New Zealand Council of Educational Research, 1940. Pp. xiii + 449.—9 experts have cooperated in preparing a series of papers covering various aspects of the life of the minority Maori group living today in New Zealand. The papers include contributions on aboriginal Maori life; on the history of Maori-white cultural contacts; and on such contemporary problems as land settlement, population trends, tribal organization, economic circumstances, health, social welfare and social disorganization, education, arts and crafts, and religion. A summary of the contributions by the editor together with a glossary and selected bibliography are included. Occasional explicit reference is made to social psychological concepts in explaining Maori work habits and racial and cultural attitudes towards the whites. Materials are also given bearing on race relations, acculturation, leadership, changing community and individual rights to property, messianic or prophetic native religions compounded from Maori tradition, and Bible study. The role that religious cults have played in the, at times, frustrated social development of the Maori people is surveyed.—*E. Beaglehole* (Victoria University).

4311. **Tilson, L. M.** *A study of the prognostic value of the Tilson-Gretsch test for musical aptitude.* *Teach. Coll. J.*, 1941, 12, 110-112.—(*Educ. Abstr.* VI: 866).

4312. Vernon, P. E. An analysis of the conception of morale. *Character & Pers.*, 1941, 9, 283-294.—Definitions of morale were studied and evaluated. 17 qualities discovered in these definitions were scaled graphically for rating purposes. Raters were psychologists or psychology majors. Half of the rates were either acquaintances of the raters or the raters themselves. The other half were persons unknown to the raters but had been interviewed by trained interviewers; ratings for these subjects were based on their interview records. The ratings were analyzed factorially by the Thurstone technique. Although the number of cases did not justify removal of more than one factor, extraction of 3 was attempted. Factor I is rather general and includes stability, optimism, trustfulness, cheerfulness, adaptability to hardships, and enthusiasm. Factor II, a group factor, represents a rational, liberal, altrocetric outlook. Factor III, a nebulous group factor, embodies a stubborn, "bull-dog," healthy, self-confident outlook, with negative saturations of tolerance and trustfulness. However, other qualities have loadings at variance with this characterization. In the order given, these factors conform roughly to 3 of Spranger's types, namely, the social, the theoretical, and the political. 8 references.—M. O. Wilson (Oklahoma).

4313. Wilson, M. T. Social competence of normal and defective twins. *Amer. J. Orthopsychiat.*, 1941, 11, 300-304.—The Vineland Social Maturity Scale was given to 60 normal and 60 mentally deficient subjects, in each group there being 15 pairs of twins and 30 siblings. The twins had experienced constant environments. The intra-pair variation in social competence was greatest for siblings, less for fraternal twins, and practically negligible for the monozygotic twins.—R. E. Perl (Jewish Board of Guardians).

[See also abstracts 4163, 4167, 4169, 4185, 4195, 4198, 4230, 4285, 4334, 4346, 4412, 4437, 4447, 4455, 4459.]

CRIME AND DELINQUENCY

4314. [Anon.] Forgetfulness. *Lancet*, 1940, 238, 178.—This is a leading article on forensic aspects of amnesia with reference to the analysis of 63 cases of psychogenic amnesia by Abeles and Schilder (see X: 1470). "The distinction between simulated amnesia and other varieties may be an impossible one to draw. . . . We are still far from able to assess with certainty the degree of clear consciousness which accompanies any action of another human being. And this is, after all, the only real psychological difference between hysteria and malingering which the psychiatrist can see. . . . None the less, the treatment he advocates will depend upon his assessment of whether there are deliberate conscious motives at work when a man forgets something which it is to his advantage to forget."—C. K. Trueblood (Cambridge, Mass.).

4315. Burt, C. Critical notice of *Juvenile delinquency: a comparative study of the position in Liverpool and England and Wales*, by J. H. Bagot. *Brit. J. educ. Psychol.*, 1941, 11, 138-142.—Bagot's (see XV: 3536) conclusion, based on the Liverpool data of 1934 and 1936, that among environmental factors poverty with its associated overcrowding is one of the principal causative factors in juvenile delinquency, is not borne out by statistical analysis. In terms of Yule's coefficient of colligation, the relation between delinquency and overcrowding is only .23, while the association with mental ability is at least as high. The practice of comparing percentages in the various categories in the delinquent and non-delinquent groups to infer degree of correlation has obvious limitations. The stress placed upon the unemployment factor is not warranted, and the rejection of psychological determinants is to be questioned. Regarding other causal agencies isolated, there is almost complete agreement with the earlier London study. The case-study method should not be dismissed as inadequate, but should be used in conjunction with the statistical approach.—R. C. Strassburger (St. Joseph's College for Women).

4316. Davidson, G. M. Medico-legal aspects of infanticide. *J. crim. Psychopath.*, 1941, 2, 500-511.—The potential criminality of the constitutionally handicapped woman is increased during the period immediately preceding and following childbirth. In cases of infanticide by the mother the offender should be committed to a psychopathic hospital for observation. "If found psychotic the person ought to be treated as any other mental case. Borderline cases ought to be treated with leniency, erring if at all on the side of a liberal view. The degree of responsibility depends upon the weight of extenuating circumstances, which in turn are the heavier the closer they are to childbirth."—A. Chapanis (Yale).

4317. Durea, M. A., & Fertman, M. H. Emotional maturity of delinquent girls. *Amer. J. Orthopsychiat.*, 1941, 11, 335-338.—The Pressey Interest-Attitudes Tests were used to measure emotional maturity of 180 girls confined in an institution for juvenile delinquents. Their scores compared unfavorably with norms for non-delinquents in terms of both total scores from 4 tests and scores on each subtest.—R. E. Perl (Jewish Board of Guardians).

4318. Durea, M. A., & Heston, J. C. Differential diagnosis of potential delinquency: additional suggestions. *Amer. J. Orthopsychiat.*, 1941, 11, 338-341.—Certain characteristics were deduced from the Pressey Interest-Attitudes Test and, in a previous study (see XIII: 5338), found to differentiate potential delinquents from non-delinquents. The authors were interested in discovering whether this differential unit would likewise distinguish significantly subjects who are behavior problems (but not palpably delinquent) from normally adjusted subjects. They found that the differential unit is a

valid means whereby possible tendencies toward delinquent behavior may be discovered.—R. E. Perl (Jewish Board of Guardians).

4319. Gutheil, E. A. **Neurosis and crime: Stekel's contributions to the problem of criminality in neuroses.** *J. crim. Psychopath.*, 1941, 2, 444-454.

—Stekel demonstrated that repressed criminal impulses as well as repressed sexual cravings may lead to neurotic manifestations. Civilization demands the suppression of primitive anti-social instincts, and one of the functions of the neurosis is their neutralization. "Unconscious aggression may be symbolically discharged, transferred into other types of energy, projected, or converted into physical or psychic symptoms." Certain types of impulsive acts, e.g., dromomania, drug addiction, and dipsomania, are the results of attempts to escape the conflict produced by the criminal impulses, while some cases of masochism and self-humiliation indicate that the conflict has been resolved by directing the aggression inward. A criminal component may also be discovered in many sexual aberrations and in the dream material of neurotics. The environmental influence which affects anti-social behavior most is faulty training in early childhood; the safest preventative against anti-social behavior is an upbringing based on common sense and a well balanced affection. Sensational journalism, pulp literature, and crime movies are detrimental influences and should be kept from the child.—A. Chapanis (Yale).

4320. Jiménez de Asúa, L. **La telepatía en la administración de justicia criminal.** (Telepathy in the administration of criminal justice.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 249-302.—The author includes not only telepathy in the usual sense but also commercial mediums, clairvoyants, and astrologers; but he excludes hypnotism of defendant or witnesses, which is forbidden in countries where penal law is influenced by liberalism and in Argentina is classed (in criminal cases) with violence. He analyzes 2 recent cases (German and Argentinian) claimed to have been solved by mediums and concludes that, although persons having suprasensory powers exist, no serious help in criminal cases can be expected from them.—M. E. Morse (Baltimore, Md.).

4321. Mannheim, H. **Social aspects of crime in England between the wars.** London: Allen & Unwin, 1940. Pp. 382. 18 s.—[Abstracted review; original not seen.] Criminological implications of fundamental problems of the period between wars, such as unemployment and strikes, alcoholism, and gambling, are discussed. Further chapters deal with juvenile delinquency, prostitution, and recidivism.—W. L. Wilkins (Milwaukee, Wis.).

4322. McHenry, F. A. **A note on homosexuality, crime and the newspapers.** *J. crim. Psychopath.*, 1941, 2, 533-548.—Considerations of good taste and the danger of having to stand suit for libel have forced newspapers to avoid mention of homosexuality as the reason for many of the crimes reported. The

author illustrates that the homosexual basis behind cases of assault and battery, robbery, murder and suicide may, however, often be inferred from newspaper accounts of these crimes.—A. Chapanis (Yale).

4323. Michaels, J. J. **Parallels between persistent enuresis and delinquency in the psychopathic personality.** *Amer. J. Orthopsychiat.*, 1941, 11, 260-274.—After discussing previous contributions to this field, the author concludes that just as sexual behavior is often the prototype for the whole pattern of general behavior, so persistent enuresis may be a paradigm of later psychopathic behavior. Persistent enuresis is a psychosomatic disorder with implications of a biological and psychological nature. It indicates the degree of incapacity for renunciation and demonstrates the lack of sublimation of the urethral erotic component. The lack of conflict in psychopathic personalities who have been persistently enuretic, in regard to their early enuresis and later behavior, has hindered treatment.—R. E. Perl (Jewish Board of Guardians).

4324. Panken, J. **The child speaks; the prevention of juvenile delinquency.** New York: Holt, 1941. Pp. 354. \$2.50.—A discussion of juvenile delinquency in which Justice Panken of N. Y. C.'s Children's Court shows why he believes that the delinquent child is usually warped by neglect and can almost always be restored to a useful place in society. Based on actual case histories.—(Courtesy Publishers' Weekly).

4325. Patterson, R. M. **Psychiatrist—criminal—court.** *J. crim. Psychopath.*, 1941, 2, 512-523.—Recent legislation enacted in the State of Michigan provides for the psychiatric examination of alleged murderers and sex offenders. Certain weaknesses in the present laws are indicated by the author, and suggestions are made for the extension of this practice to include all criminal cases. "Eventually the court should become a fact finding body whose only power would be to commit offenders to a treatment commission. This commission composed of psychiatrist, educator, sociologist, and criminologist would then determine the best correctional procedure for the individual concerned and for the protection of the public."—A. Chapanis (Yale).

4326. Schneickert, H. **Leitfaden der kriminalistischen Charakterkunde.** (Guide to criminal characterology.) Jena: Fischer, 1941. Pp. 170. RM 6.—[Abstracted review; original not seen.] This book, which is based on the works of Kretschmer and Klages and on graphology, is designed for criminologists. Schneickert believes that a knowledge of characterology is essential, particularly in evaluating evidence.—M. E. Morse (Baltimore, Md.).

4327. Schnur, S. **Malingering responsible for long-continued unexplained fevers.** *Sih. med. J., Bgham.*, 1940, 33, 768 ff.—[Abstracted review; original not seen.] The author has encountered 4 cases of long-continued unexplained fevers due to fraud. The clinical pattern and the method whereby

the fever was produced in each case are described, and a procedure to be followed in all suspects is given.—*M. Keller* (Butler Hospital).

4328. Springer, N. N. Kent Oral Emergency and Stanford-Binet tests applied to adolescent delinquents. *Amer. J. Orthopsychiat.*, 1941, 11, 292-300.

—Both the Kent and the Binet were given to 70 male delinquents ranging in age from 16.1 to 18.9. Both tests showed this group to be of dull normal intelligence, the difference between the scores on the 2 tests being statistically insignificant. Feeble-minded and borderline delinquents tend to make higher scores on the Kent than on the Binet, while this tendency is reversed with delinquents within the normal intelligence range.—*R. E. Perl* (Jewish Board of Guardians).

4329. Wertham, F. The matricidal impulse: critique of Freud's interpretation of Hamlet. *J. crim. Psychopath.*, 1941, 2, 455-464.—Overattachment toward the mother can be transferred into a violent hostility against her. This phenomenon, called the Orestes complex, is clearly evident in Hamlet and in some cases of matricide. Matricidal murderers are usually very young, without previous criminal or delinquent records, hypermoral rather than immoral, excessively fond of their mothers, and only slightly interested in the other sex.—*A. Chapanis* (Yale).

[See also abstracts 4223, 4228, 4233, 4469.]

INDUSTRIAL AND PERSONNEL PROBLEMS

4330. Achilles, P. S. Report on the activities of the Psychological Corporation—1940. *J. appl. Psychol.*, 1941, 25, 213-226.—The activities of the Psychological Corporation in the fields of marketing and social research, industrial and personnel research, clinical work, testing for schools of nursing, and the distribution of tests are summarized for the year 1940.—*E. E. Ghiselli* (California).

4331. [Anon.] Job evaluation: formal plans for determining basic pay differentials. *Stud. Person. Policy, Nat. indust. Conf. Bd.*, 1940, No. 25. Pp. 43.—[Abstracted review; original not seen.] This report is chiefly a detailed examination of the rating plans used by 11 companies for factory and production workers and other salaried personnel in determining pay differentials. While 6 to 10 job characteristics are used, they can be grouped under 4 heads: skill, responsibility, effort required, and job conditions.—*K. B. Breland* (Minnesota).

4332. Barnes, R. M., & Mundel, M. E. A study of simultaneous symmetrical hand motions. *Univ. Ia. Stud. Engng.*, 1939, No. 17. Pp. 39.—In order to evaluate the influence which the motion path of an operator's hands has on the efficiency of bimanual symmetrical activity, 2 types of motions were chosen, one in which only the terminal points of the motions were fixed, and one in which both, terminal points and paths, were fixed. The tasks consisted in

carrying an electrode to a terminus and pushing carriages back and forth along a set path, with simultaneous contact points for both hands at irregular intervals along the path. 10 students spent 12 half-hour periods on each task, and carried out the operation at angles of 90, 60, 30, and 0 degrees from body position. At the 90° angle students missed 29% less cycles and showed a fatigue rate that was 39% lower than at any other angle when the terminal point alone was fixed; when both terminal point and path were fixed, the 60° angle had a preference over the others of from 3 to 9%.—*H. Moore* (Business Research Corporation).

4333. Barnes, R. M., Mundel, M. E., & MacKenzie, J. M. Studies of one- and two-handed work. *Univ. Ia. Stud. Engng.*, 1940, No. 21. Pp. 67.—The pattern of the 3 studies reported in this monograph is the same: 5 college students move nuts, by the hook and pinch grasp, 25 times from one position to another and do the same with 5 differently sized cubes, placing the cubes in assigned slots. The movements are analyzed into 4 therbligs, and the lengths of the therblig times are compared.—*H. Moore* (Business Research Corporation).

4334. Bengt, E. J. How to make a morale survey: a manual of procedures. Deep River, Conn.: National Foreman's Institute, 1941. Pp. 63. \$7.50.—The chapter headings are: employee morale, morale questionnaires, making the morale study, analyzing the results, applying the findings, and some case studies. There is a bibliography of 20 titles, and 22 illustrative figures are appended.—*W. S. Hunter* (Brown).

4335. Bennett, G. K. The museum technique applied to market research. *J. consult. Psychol.*, 1941, 5, 183-186.—Results of studies of the behavior of people in observing displays in museums are summarized. Results of some preliminary observations on the reactions of visitors to commercial exhibits at the New York World's Fair are also given. In making their displays more effective with respect to location exhibitors should consider easy visibility and locations where "room time will not be diminished" and where "a closer relationship between cycle time and the visitor's interest span" will be produced.—*P. S. de Q. Cabot* (Simmons).

4336. Blum, M. L., & Candee, B. The selection of department store packers and wrappers with the aid of certain psychological tests: II. *J. appl. Psychol.*, 1941, 25, 291-299.—Scores on the O'Connor finger dexterity and Minnesota placing tests were found to be poor predictors of the success of department store packers and wrappers. The Minnesota clerical test, however, gave a fairly good prediction. (See also XV: 3104.)—*E. E. Ghiselli* (California).

4337. Buck, J. N. The use of psychological tests in institutional personnel work. *Amer. J. ment. Def.*, 1941, 45, 559-564.—10 tests ranging from one of simple manual speed to tests of conceptual level and productivity are employed in evaluating the probable potential worth of institutional attendants.

Testing and history taking require about an hour. Qualifications for the job are listed and danger signs pointed out.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

4338. Burt, H. E. Current trends in marketing research. *J. consult. Psychol.*, 1941, 5, 145-148.—A review of 7 subsequent articles.—*P. S. de Q. Cabot* (Simmons).

4339. Channell, R. C. Fatigue and hours of service of interstate truck drivers. III. Driving and glare tests. *Publ. Hlth Bull., Wash.*, 1941, No. 265, 179-194.—The DeSilva apparatus for the measurement of driving efficiency and road glare was used to measure (1) brake reaction time, (2) steering efficiency, (3) vigilance, (4) complex vigilance, (5) glare, and (6) glare recovery. The tests were administered to approximately 700 interstate truck drivers. Men who had driven since a major sleep (6 hours or more) had longer mean reaction time and a slightly lower mean steering efficiency than those men who had not driven. The illumination necessary to distinguish an object in the presence of glare was on the average greater for men who had driven than for those who had not driven since a major sleep. The mean time for recovery after exposure to glare was greater for men who had driven than for those who had not and was greatest for those men who had driven longest. The study was conducted by the Division of Industrial Hygiene of the United States Public Health Service and financed by the Interstate Commerce Commission.—*W. H. Wulfeck* (Princeton).

4340. Collins, J. H. Selection of employees for good public relations. *Publ. Util. Fortn.*, 1940, 26, 663-672.—[Abstracted review; original not seen.] An account of the Humm-Wadsworth temperament scale as used by public utilities companies in selecting employees for jobs involving contact with the public.—*K. B. Breland* (Minnesota).

4341. Culler, A. M. Visual efficiency in industry. *J. Amer. med. Ass.*, 1941, 116, 1349-1355.—Data from a number of studies on the present visual efficiency of industrial workers are summarized, and the increase with age of visual defects is shown. It is important to measure several ocular functions in estimating visual efficiency: visual acuity, the field of vision, muscular efficiency. In the industrial situation, however, it is usually practicable only to test near and far visual acuity; other possible measures are briefly reviewed. Various types of occupations are listed with their ocular requirements, suggested visual examinations for them, and a tentative minimum required visual efficiency for each. There is a tabulation of state compensation laws concerning visual disability. Corneal injuries and their sequelae and the factors of illumination and protection of the eyes during work are discussed.—*C. N. Cofer* (George Washington).

4342. Davis, D. D., Ryder, F. A., & Boelter, L. M. K. Measurements of highway illumination by automobile headlamps under actual operating condi-

tions. *Trans. Illum. Engng Soc. N. Y.*, 1939, 34, 761-782.—(*Sci. Abstr.*, B, XLII: 2215).

4343. Davis, R. C. Employee morale. *Mich. Bus. Pap.*, 1939, No. 3, 25-37.—[Abstracted review; original not seen.] 7 phases for obtaining and maintaining employee morale are outlined and discussed.—*K. B. Breland* (Minnesota).

4344. Drake, C. A. Marksmanship: aptitude or skill? *Infantry J.*, 1941, 49, 48-50.—In a study designed to discover whether rifle marksmanship can be determined prior to training, the best, average, and poorest marksmen in an ROTC unit took 2 forms of a paper and pencil visual perception test, the telebinocular visual test, a test of muscle perception, a test of touch perception, and an eye-hand coordination test; visual acuity was also measured. The error score on one form of the visual perception test correlated -.6 with marksmanship, and the time score correlated -.3. This test is described, and part of it is reproduced in a figure. Acuity of the aiming eye correlated .4 and errors in the tactual perception test -.3 with marksmanship. The other tests gave no significant results.—*C. N. Cofer* (George Washington).

4345. Dudycha, G. J. A suggestion for interviewing for dependability based on student behavior. *J. appl Psychol.*, 1941, 25, 227-231.—From a summary of the experimental findings relative to dependability a number of questions were developed which may be used as aids for an evaluation of the trait in the employment interview.—*E. E. Ghiselli* (California).

4346. Farago, L., & Gittler, L. F. [Eds.] German psychological warfare: survey and bibliography. New York: Committee for National Morale, 1941. Pp. 155. \$3.50.—In the survey section, the editors consider the German examination and critique of past wars, psychology in total war, German psychological warfare, and American influences on German military psychology. Under the topic of psychology in total war, the following topics are discussed: mobilization of German psychology; psychological problems of leadership; selection and testing of personnel; psychology of military life; and the psychology of combat. Kimball Young contributes a brief section on the results of the survey from the American point of view. There is a bibliography of 561 titles covering technical psychology and contributions from a variety of other fields including the writings of military men.—*W. S. Hunter* (Brown).

4347. Fite, H. A case study in employee morale. *Publ. Person. Rev.*, 1941, 2, 138-140.—This is an account of the methods used in improving the morale of Los Angeles refuse collectors. Incentives, self-government, and improvement of working conditions were among the more successful techniques.—*K. B. Breland* (Minnesota).

4348. Grunwaldt, —. General von Voss; zehn Jahre deutscher Wehrmachtpsychologie. (General von Voss; ten years of German military psychology.)

Arch. ges. Psychol., 1939, 103, 273-275.—Appreciation and portrait.—H. L. Ansbacher (Brown).

4349. Hutchison, G. S. Selection and education of an officer. *Army Quart.*, Lond., 1941, 42, 66-74.—The 3 avenues of scientific approach to the study of education are physiology, psychology, and sociology. In relation to the contributions and implications of these 3 approaches, the author considers the type of education likely to produce the most efficient army officer.—G. S. Speer (Central YMCA College).

4350. Klapp, O. E. Imitation-value in advertising. *J. appl. Psychol.*, 1941, 25, 243-250.—"The historical trend in advertising, with respect to the use of pictures of human beings, appears to be toward personalization and dramatization of appeals; more description of use, enjoyment, demonstration, recommendation, etc.; greater emphasis on the social 'front' which is built up for products by the use of human beings in testimonials and 'examples'—to the end that 'quality-of-the-merchandise' as a selling point may tend to be occasionally somewhat obscured."—E. E. Ghiselli (California).

4351. Koepke, C. A., & Whitson, L. S. Summary of a series of experiments to determine the power and velocity of motions occurring in manual work. *J. appl. Psychol.*, 1941, 25, 251-264.—A study of the maximum power which can be exerted by various types of arm movements in propelling weights of 6-21 lbs. indicated that there is no relationship between maximum horsepower attained and acceleration of the weight, and that a straight pulling motion from a position in front of the body gives the greatest power, while a forward thrust from a position at the side of the body gives the least power.—E. E. Ghiselli (California).

4352. Kornhauser, A. W. The role of psychological interpretation in market research. *J. consult. Psychol.*, 1941, 5, 187-193.—Psychologists have been active in the field of consumer reactions particularly with the contribution of specific techniques such as improved questionnaire and interview methods, rules for sampling, and the measurement of attitudes. Interpretation of facts is equally important; particularly interpretation of motivation is a challenging area for investigation. Psychological understanding can be either personal or impersonal. Subtle motivational hypotheses may have to be adopted in many special problems, but in every case a well rounded interpretation is required.—P. S. de Q. Cabot (Simmons).

4353. Lazarsfeld, P. Evaluating the effectiveness of advertising by direct interviews. *J. consult. Psychol.*, 1941, 5, 170-178.—Some hypothetical situations with suggested techniques for ensuring scientifically derived results are cited.—P. S. de Q. Cabot (Simmons).

4354. Marshall, G. S. Physiological problems of human flight. *Lancet*, 1940, 238, 270-271.—The author divides the physiological problems of flight into those of position and those of movement. Chief among the problems of position is that of "combat-

ting the effects of high altitude by getting sufficient oxygen into the blood when the partial pressure in the inspired air is too feeble. . . . The flier remains well up to about 37,000 feet, if supplied with oxygen, but at 40,000 feet oxygen want is shown in the handwriting by reduplication of syllables and misspelling." Methods of supplying oxygen by air-tight suits and pressure cabins are described. The chief problem connected with movement is that of counteracting the effects of acceleration and centrifugal force, e.g., as experienced when the pilot pulls out of a power dive. "The commonest symptom of excessive acceleration is 'blacking out,' known to the Germans as the 'Vorhang' or curtain. . . . Bending the body forward and tightening the muscles will alleviate the effect. If the pressure is continued for long the pilot will faint. The symptoms are caused by the movement of the body fluids into the splanchnic area. . . . The problem would be solved by . . . preventing blood from being accumulated in the belly. . . . The cause of temporary blindness due to acceleration is probably a fall in the arterial pressure in the neighborhood of the eye to a point at which the blood can no longer overcome the intraocular pressure of 20-25 mm."—C. K. Trueblood (Cambridge, Mass.).

4355. Osborn, F. H., Taft, C. P., & Draper, W. H., Jr. Building morale in the United States Army and Navy, as described in a radio broadcast by 3 government officials. *J. soc. Hyg.*, 1941, 27, 221-227.

4356. Perucca, E., Brigatti, C., & Deaglio, R. Tempo di adattamento alla visione dopo abbagliamento. (Visual adaptation time after bright illumination.) *Atti Accad. Torino*, 1938, 73, 218-227.—[Abstracted review; original not seen.] This experiment was conducted to determine the illumination required for an automobile driver to recognize objects with sufficient speed when he turns from a brightly illuminated road into one with less illumination. The time Δt was determined after which an eye which has looked for some time at a brightly illuminated field recognizes a less bright object against a still darker background. Even when the illumination of the object is as great as the starting illumination of the whole field, recognition time is not reduced to zero. It may be as low as 1 msec., however.—H. L. Ansbacher (Brown).

4357. Powell, N. J. Examining examiners. *Educ. psychol. Measms.*, 1941, 1, 157-172.—A detailed account of the procedures adopted by the New York City Civil Service Commission in the selection of examiners for the city's school system is given. Particular reference is made to one examination where an appeal was taken by defeated candidates to the Court of Appeals.—P. S. de Q. Cabot (Simmons).

4358. Powell, N. J. Research in administrative selection. *Publ. Person. Quart.*, N. Y. C., 1941, 2, 115-123.—Effort is made to set forth and explore the possible research methods, analyzing the defects and strength of each, which may be utilized in determining a selection base; to make explicit some of the

principal implicit assumptions underlying the possible analytic techniques; and to evaluate the possible research attacks. The author classifies many specific techniques under the headings spaced groups and expert opinion, suggesting the combination of advantages of both methods as most promising.—*H. Hausheer* (Lamoni, Ia.).

4359. **Reitell, C.** *Training workers and supervisors.* New York: Ronald Press, 1941. Pp. 195. \$1.50.

4360. **Riegel, J. W.** *The selection and development of prospective foremen.* *Bull. Bur. industr. Relat., Univ. Mich.*, 1941, No. 11. Pp. 69.—Based on studies of foreman-training programs in 50 companies and of executive opinion regarding the selection and development of prospective foremen in 20 leading companies, this monograph gives a survey of the responsibilities of foremen and subforemen, of the current means of selecting candidates for training, of the means used to help candidates understand supervisory problems, and of the methods employed in developing managerial skills and personality traits. Specimen statements of foremen's responsibilities in a steel mill, the maintenance department of a chemical plant, and the warehouse division of a petroleum company complete the monograph.—*H. Moore* (Business Research Corporation).

4361. **Roper, V., & Scott, K. D.** *Silhouette seeing with motor car headlamps.* *Trans. Illum. Engng Soc. N. Y.*, 1939, 34, 1073-1083.—(*Sci. Abstr.*, B, XLIII: 143).

4362. **Stanton, F.** *Problems of sampling in market research.* *J. consult. Psychol.*, 1941, 5, 154-163.—Within the last 10 years considerable improvement has been made in the methods of sampling a prospective consumer market. Representativeness and the size of the sample are major considerations; each can be checked and controlled. 3 types of sampling techniques are: accidental, random, and stratified. Each is discussed. Stratified sampling ensures the most adequate representativeness.—*P. S. de Q. Cabot* (Simmons).

4363. **Weaver, H. G.** *Proving ground on public opinion.* *J. consult. Psychol.*, 1941, 5, 149-153.—The task of proving the likes and dislikes of the public cannot be left to salesmen. Certain aspects of the author's work with the Customer Research Staff of General Motors are described.—*P. S. de Q. Cabot* (Simmons).

4364. **Welch, A. C.** *An analytic system of testing competitive advertising.* *J. appl. Psychol.*, 1941, 25, 176-190.—A brand preference test, a brand familiarity test, a theme credence test, and a triple associates test were found to be an effective combination in indicating the specific strong and weak points of advertising campaigns. Examples are given of the use of this combination of tests in analyzing competitive advertising.—*E. E. Ghiselli* (California).

4365. **Wulfbeck, W. H.** *Fatigue and hours of service of interstate truck drivers. II. Psycho-*

motor reactions. *Publ. Hlth Bull., Wash.*, 1941, No. 265, 135-177.—Financed by the Interstate Commerce Commission, the Division of Industrial Hygiene of the United States Public Health Service conducted an investigation to determine the physical and psychological effects of driving interstate trucks for various periods of time. A battery of 11 performance tests of manual dexterity and motor function were administered to 789 men regularly employed as interstate truck operators. Test results were analyzed by comparing the mean performances of the drivers who had driven 0, 0.1-9.9, and 10 hours or more since a major sleep (one of at least 6 hours). As the length of the daily drive increased, there was a corresponding decrease in the functional efficiency of the driver on many of the tests. The work decrement measure most clearly defined the differential effects of the various lengths of drive.—*W. E. Kappauf* (Princeton).

4366. **Yerkes, R. M.** *Psychology and defense.* *Proc. Amer. phil. Soc.*, 1941, 84, 527-542.—The contribution of psychology during the last war is reviewed. While the United States' military psychological services then were superior to those of other countries, this is not true today; Germany developed military psychology between wars, whereas the United States neglected it. German psychological activity in the army and our own lack of preparation in this field are described. Psychology can perform many other services in human engineering, and the proposal is made "that psychology be recognized as science and profession basic to the development of all branches of human engineering; that professional schools of psychology, after the model of the best in medicine and physical engineering be established; that these schools have high admission standards, provide a 4 year course (2 years basic science and 2 years of psychotechnological specialization), and grant a new degree. Licensing of those trained to practise a psychological specialty is suggested.—*C. N. Cofer* (George Washington).

[See also abstracts 4119, 4131, 4135, 4137, 4211, 4213, 4216, 4247, 4271, 4302, 4377.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

4367. **Anderson, H. H.** *Measures of classroom behavior as a guide to teacher selection.* *Understanding the Child*, 1941, 10, No. 2, 7-11.—The terms domination and social integration have been applied both to the behavior of the children and to that of the teacher in an attempt to find reliable and valid measures of the teachers' behavior which may be used in teacher selection. In classifying the teachers' contacts with the children into dominative or autocratic behavior on the one hand and socially integrative or democratic behavior on the other hand, the author has subdivided each type of contact into 3 degrees as follows: domination (1) with evidence of conflict, (2) with no evidence of conflict, (3) in working together; integration (1) in conflict, (2) with no evidence of working together, (3) in

working together. In conjunction with these categories 29 categories of child behavior were recorded simultaneously. Recent data on the reliability of such observations "indicate that separate categories of teacher-behavior and child-behavior had sufficiently high agreement to permit their use as measures of behavior in the classroom."—S. A. Kirk (Milwaukee).

4368. [Anon.] *Proceedings of the sixth annual Guidance Conference held at Purdue University, November 29 and 30, 1940. Stud. higher Educ., Purdue Univ., 1941, No. 40. Pp. 94.*—These 11 papers are concerned with vocational and educational guidance problems, chiefly at the high school level, in relation to present world economic and social conditions.—G. S. Speer (Central YMCA College),

4369. Archer, R. L. *Educational psychology. American and British: some points of comparison. Brit. J. educ. Psychol., 1941, 11, 128-134.*—Considering Judd's recently-published text (see XIV: 1073) as representative of current trends in the field in the United States, through an evaluative survey of its contents and exposition a discussion of national differences in educational psychology is undertaken. The existence of national barriers, unique to the social sciences, is noted, and this condition is attributed to the more recent origin of these disciplines. In the case of educational psychology, although sectional differences have long existed, there is evidence of a growing approximation of viewpoint between the United States and Great Britain as regards subject matter. Concerning the organization of material and manner of presentation, the method of arrangement according to the main subjects in the curriculum exemplified by Judd's book may appear to the mind of the British reader as fragmentary and unscientific.—R. C. Strassburger (St. Joseph's College for Women).

4370. Atkinson, W. N. *A study of high school and college subject matter patterns for four groups of university students. J. exp. Educ., 1941, 9, 195-204.*—Students selected for this study were those majoring in English, law, medicine, and engineering. These groups were selected as representative of curricula which differ considerably. Successful English students, as a group, were superior in general scholastic ability to groups of successful students in law, medicine, and engineering. There were no real differences in scholastic ability among the successful students in the latter subjects. Scholastic ability as measured by rank (in thirds) in high school graduating class, rank on college entrance examinations, and grades in preliminary college courses is more important for success in any of the curricula included in the study than specific characteristics of the high school subject matter pattern. One of the most impressive findings, according to the author, is the success, in each group, of students who, by every measured index, should have failed. This suggests that some quality, which might be called persistence, may be an important factor in college success.—H. W. Karn (Pittsburgh).

4371. Baker, G. D. [Ed.]. *New methods vs. old in American education; an analysis and summary of recent comparative studies by the informal committee appointed by the Progressive Education Association to report on evaluation of newer practices in education.* New York: Bureau of Publications, Teachers College, 1941. Pp. vii + 56.—In abbreviated, non-technical style this report summarizes and interprets the major research findings of the last 25 years which compare the relative values of progressive and traditional education. "In general, the evidence shows convincingly that the new methods do not result in a loss of academic proficiency in the usual school subjects, and that, where any measures have been applied, there is a definite gain in terms of initiative, skill in dealing with problems, knowledge of contemporary and world affairs, and social participation." A bibliography of 16 titles is appended.—S. S. Sargent (Barnard).

4372. Barr, A. S., & Harris, A. E. *Teacher's performance record.* Bloomington, Ill.: Public School Publishing Co., 1941. Pp. 6. \$0.10 per copy; \$0.25 per copy of *Supervisor's handbook*; \$0.35 per sample set.—This blank is "prepared to assist supervisors in the evaluation and improvement of the teacher's performance in the classroom" and may be used also in the training of supervisors. Ratings of appropriateness (choice of activities) and skill make up a professional competency rating, while the latter plus personal fitness and pupil change score make up the general merit rating. Correlation of scores of 2 observers who observed the same teacher teach at the same time was .82.—L. M. McCabe (Cambridge, Mass.).

4373. Beals, R. A., & Brody, L. *The literature of adult education.* New York: American Association for Adult Education, 1941. Pp. xviii + 493.—The 55 pages of chapter 2, entitled "Clientele," of this survey of recent adult education literature will be of interest to psychologists. They review psychological studies of adults (abilities, interests and needs, concepts and attitudes) and conclude with a section on the characteristics of adult students.—S. S. Sargent (Barnard).

4374. Boardman, C. W. *An experimental approach to the integration of professional courses at the University of Minnesota; a progress report. J. educ. Res., 1941, 34, 672-678.*—At the University of Minnesota, there has been developed an integrated course in education which covers the materials of the junior year's 3 courses in educational psychology, general methods, and principles of secondary education. Experimental and control groups were tested with objective examinations to test information and to measure the ability to apply or use information. The results, though not conclusive, are not wholly discouraging. There seems to be a good deal of interest and enthusiasm for the integrated course among the students and especially among the instructors who are teaching the course.—S. W. Fernberger (Pennsylvania).

4375. Brown, C. W. The study habits of failing and successful students in the first two years of college. *J. exp. Educ.*, 1941, 9, 205-208.—Questionnaire results show that among students reporting the use of correct study habits the percentages of failing students were as large as the percentages of successful students. Large percentages of both, failing and successful students, fail to make use of many efficient study techniques.—H. W. Karn (Pittsburgh).
4376. Brown, C. W., & Lofgren, P. V. The nature of some of the difficulties of students failing the first two years of college. *J. exp. Educ.*, 1941, 9, 209-215.—Average grade point ratings were determined for each student for his 4 years of high school and his 2 years of college work. In addition, high school achievement was evaluated separately for the following fields: English and language, mathematics and natural science, social science, and biological science. Specific data on the comparative performance between failing and successful students in the various fields of achievement are presented. The most outstanding difference between the failing and successful groups was not a difference in pattern of achievement, but a difference in level of achievement, the performance of the failing group being depressed in all of the measures studied.—H. W. Karn (Pittsburgh).
4377. Brush, E. N. Mechanical ability as a factor in engineering aptitude. *J. appl. Psychol.*, 1941, 25, 300-312.—A large number of tests of mechanical ability were administered to groups of engineering students, and the scores were compared with grades earned in engineering courses. The effectiveness of various combinations of these tests is discussed. An extensive review of the pertinent literature is given.—E. E. Ghiselli (California).
4378. Bullis, H. E. Mental hygiene for normal children. *Delaware St. med. J.*, 1941, 13, 128-130.—This is a description of the set-up of mental hygiene classes (classes in human relations) being conducted in the 7th and 8th grades of 10 Delaware schools. The methods employed are briefly described, and quotations from children, educational administrators, and teachers are cited to indicate the success of the program.—C. N. Cofer (George Washington).
4379. Carmichael, L. Some educational implications of the National Roster. *Educ. Rec.*, 1941, 22, 461-473.—The purpose of the Roster is explained and the procedure described. In the post-war period it should be useful by showing where certain types of experts are to be found and, in connection with vocational guidance, where skills are in demand.—F. C. Paschal (Vanderbilt).
4380. Carrier, B. Psychiatric counseling. *J. higher Educ.*, 1941, 12, 201-205.—Experience in student counseling has suggested that in addition to whatever tests form the pre-entrance screening device, counseling of the psychiatric type is a promising resource in both selection and placement. This type of counseling is urged especially for teachers colleges. The author discusses the usual problems, emotional disturbances, and the adolescent experiences involving a broader knowledge of life. It is deemed advisable that the counselor should teach one or two courses in order that the students may have the opportunity to voluntarily discuss their problems, establishing a relationship which will eliminate the feeling of "going to the doctor's office." Cases discussed give evidence to the fact that the mere discovering of problems is not sufficient and that an extended discussion is needed for rehabilitation.—R. A. Brotemarkle (Pennsylvania).
4381. Charosh, M. Possible transfer values of 10th year mathematics. *High Points*, 1941, 23, 71-76.—The author believes that there are greater transfer values in mathematical training than have been appreciated to date and discusses the general and specific possibilities of transfer in "the application of postulational reasoning to geometric and non-geometric situations."—G. S. Speer (Central YMCA College).
4382. Charters, W. W. Remedial reading in college. *J. higher Educ.*, 1941, 12, 117-121.—A survey of 675 colleges drew 172 responses, 106 of which indicated activity in remedial reading. Success in improvement of reading skills was uniformly reported. The projects are included in the curriculum as part of an established credit course or as independent units, either with or without credit. Credit courses usually last one semester; non-credit work continues as long as necessary for each individual student. Enrollees are selected through standard tests of reading speed and comprehension, intelligence tests, high school ranking, comprehensive examinations, English project tests, reports from cooperating instructors, failure in courses, and voluntary participation. For the most part class membership is voluntary, since "an unwilling student gains little from required attendance." Enrollment in the groups varies from 5 to over 300, the middle half falling between 15 and 40. A diagnosis, made before or after admission to the class, reveals the usual physiological, mechanical, and mental difficulties encountered in how-to-study courses, and the ensuing remedial instruction consequently is of individual or individual-group character in units designated as laboratories, seminars, clinics, or workshops. 24 institutions, selected on the basis of seasoned programs, which are willing to share their ideas with others, are listed.—R. A. Brotemarkle (Pennsylvania).
4383. Ciorănescu, I. Considerațiuni istorice asupra școlilor de surdo-muți, ca izvor de investigațiuni psiho-pedagogice. (Historical considerations regarding schools for the deaf-mute as a source of psychopedagogical investigations.) *J. Psihoteh.*, 1940, 4, 173-183.—The author contrasts non-experimental pedagogy with experimental medicine and insists on the need for experimental procedures in education. He sharply criticizes present methods of teaching reading to normal students. This is followed by an historical account of the teaching of the deaf-mute and the feeble-minded, with special

reference to Germany. The inertia prevailing in Rumania in these fields is indicted.—*S. Devereux* (Cambridge, Mass.).

4384. Cleeton, G. U. *Studies in the psychology of vocational adjustment: miscellaneous papers*. Pittsburgh: Carnegie Institute of Technology, 1940. Pp. 28.—This booklet includes the following 4 papers presented by the author at various meetings: a study of positive and negative attitudes toward common occupations; implications of industrial selection by tests; measuring susceptibility to accident in street car operators; and an analysis of women's vocational interests.—*L. M. McCabe* (Cambridge, Mass.).

4385. Deer, G. H. *The Peabody Library Information Test: a study of its statistical validity and reliability*. *J. exp. Educ.*, 1941, 9, 233-236.—"The findings indicate that the test is capable of a high degree of discrimination between freshmen classes of different schools as well as between classes at different scholastic levels within the same college. It also measures a distinct difference in the amount of knowledge possessed by a junior class before and after two weeks' instruction in library usage. The eight separate sections of the test show such low intercorrelations as to indicate that each is measuring a separate function which is not measured by either of the other seven parts." With the exception of one group, the odd-even reliability coefficient ranged from .81 to .96. The P.E._{est} for an individual's raw score ranged from 1.75 to 4.5.—*H. W. Karn* (Pittsburgh).

4386. Dooley, W. H. *Vocational training for the non-academic pupil in the academic high school*. *High Points*, 1941, 23, 37-45.—As a result of developments in psychology and sociology the elementary and junior high schools have revised their programs to meet the needs of the students with IQ's below 100. This has permitted an increasing number of dull students to enter the academic senior high schools and vocational schools. Because of the great demand, standards have been raised so that now there are no courses in the high schools suitable for students with an IQ below 100. The author presents a plan which will permit the academic and vocational training of these pupils and considers its effects on abilities, intelligence, and personality development.—*G. S. Speer* (Central YMCA College).

4387. Drees, M., & Mooney, E. *Interest inventory for elementary grades (for grades 4, 5, and 6): Form A*. Washington, D. C.: George Washington University, 1941. Pp. 6. \$1.25 per 25; \$0.25 per specimen set.—This inventory may be used for diagnostic and guidance purposes. It includes 250 items covering reading, movies, radio, games and toys, hobbies, things to own, school subjects, people, occupations, and activities. Response is made by encircling L(ike), I(ndifferent), D(islike), or U(nknown). The method of scoring makes possible the comparison of a child's responses and his total inventory score with those normal for

his sex and grade. Reliability is given in terms of the average percentage of constancy of responses on 2 tests taken a few days apart by 50 children. The constancy is for grade 4, 86%; grade 5, 85%; grade 6, 83%; and for the total group, 85%.—*L. M. McCabe* (Cambridge, Mass.).

4388. Educational Records Bureau Staff. *1941 achievement testing program in independent schools and supplementary studies*. *Educ. Rec. Bull.*, 1941, No. 33. Pp. 76.—The history and activities of the Educational Records Bureau are reviewed, and a summary of the test results applying to the 1941 independent school achievement testing program is presented. In addition, two special studies are reported, the first describing certain data on the difficulty and validity of the Cooperative Tests in biology, chemistry, and physics, Form ERB-R, and the second dealing with the intercorrelations of scores on the 1938, 1939, and 1940 college freshman editions of the American Council Psychological Examination.—*D. G. Ryans* (Cooperative Test Service).

4389. Elliott, A. E. *Standardized tests used with the deaf*. *Amer. Ann. Deaf*, 1941, 86, 242-249.—This is a classified arrangement of reports, made in the past 3 decades, of studies in which standardized tests were employed with deaf children. The author, title, reference, type of test, and number of subjects used are given. 82 studies are listed.—*C. V. Hudgins* (Clarke School).

4390. Fagan, R. C. *Why pupils fail*. *Nation's Schs.*, 1941, 27, 58 f.—A discussion of the personality problems of school children which most commonly result in school failure.—*G. S. Speer* (Central YMCA College).

4391. Flanagan, J. C. *An analysis of the results from the first annual edition of the National Teacher Examinations*. *J. exp. Educ.*, 1941, 9, 237-250.—The analysis indicates that candidates for teaching positions are not equally well qualified and that a fairly long and varied battery of examinations is necessary to describe the various candidates adequately. Evidence is presented to illustrate the validity of the various parts of the examinations.—*H. W. Karn* (Pittsburgh).

4392. Gentry, C. G. *Vocational inventory*. Minneapolis: Educational Test Bureau, 1940. Pp. 30. \$0.25 per sample set.—"This inventory is designed to assist teachers, principals, guidance counsellors, and personnel directors in their efforts to lend educational, vocational, and general guidance" and is the culmination of work started by the author in 1921. It is made up of 434 items, items 385 to 434 comprising a personality inventory. The validity of the inventory as a basis for predicting both vocational success and success in college is discussed at some length in the manual. Reliability is given in terms of percentage of change in inventory returns for 412 students who took the test at the end of grade IX-A and again at the end of grade XII-A. These percentages are for the vocational inventory part: same, 70%; kindred, 20%; different, 10%; for the

vocational choice part: same, 53%; kindred, 28%; different, 19%.—*L. M. McCabe* (Cambridge, Mass.).

4393. Gilliland, A. R. A study of admission requirements in general psychology. *J. appl. Psychol.*, 1941, 25, 171-175.—During the past 15 years there has been a marked tendency to reduce the requirements for entrance into introductory courses in psychology. A study of the grades earned in introductory psychology courses at 2 universities by freshmen and sophomores, equated for intelligence test scores, indicated a superiority on the part of the latter students, but the difference was not highly significant statistically.—*E. E. Ghiselli* (California).

4394. Granger, L. B., Sobel, L. H., & Wilkinson, W. H. H. Toward job adjustment, with special reference to the vocational problems of racial, religious and cultural minority groups. New York: Welfare Council of New York City, 1941. Pp. 78. \$0.50.—This is a manual for interviewers in employment agencies, concerning specific techniques which they may use to counteract the effects of job discrimination against individuals of minority groups. The techniques to be used in the employment office itself revolve around treatment of these clients as individuals rather than in terms of stereotyped notions about their respective minority groups. Devices are also offered whereby interviewers may gradually change the discriminatory attitudes and practices of employers and labor unions.—*C. Glick* (Brown).

4395. Greene, G. S. The correlation between skill in performance and knowledge of principles in a course in speech-making. *J. appl. Psychol.*, 1941, 25, 232-242.—The coefficients of correlation between skill in performance in speech-making (as measured by teachers' grades in speech courses), grades in objective examinations in principles of speech-making, and grades in freshmen English courses ranged from .40 to .44.—*E. E. Ghiselli* (California).

4396. Hayes, S. P. Mental measurements of the blind: history, inventory, criticism. *Teach. Forum (Blind)*, 1941, 13, 42-52; 60.—(*Educ. Abstr.* VI: 798).

4397. Held, O. C. Students asked to leave. *J. higher Educ.*, 1941, 12, 318-320.—A brief study of 582 students asked to leave the College of Liberal Arts of the University of Pittsburgh during the period from June, 1933 to June, 1939, shows the group ranging in ability from the highest to the lowest mental level and from the highest to the lowest fifth of their high school classes. 2/3 came from the lower 3/5 of their high school classes. The group constituted 2% of the total enrollment; 79% were men, 21% were women; percentage of men in the total enrollment was 55%. In proportion the highest loss was among students enrolled for the B.A. degree; next in order were the pre-medical and the pre-educational students. The study attempted to discover only academic background as one cause of failure.—*R. A. Brotemarkle* (Pennsylvania).

4398. Hills, J. R. Hills economics test. Emporia, Kan.: Kansas State Teachers College, 1940. Pp. 4.

\$0.50 per 25; \$0.15 per specimen set.—166 objective items are presented for use as an achievement test for high-school and college classes in elementary economics. Odd-even correlation, extended by the Brown-Spearman formula, was $.92 \pm .004$. Percentile scores based on 1250 cases are given, also a translation of these scores into school marks.—*L. M. McCabe* (Cambridge, Mass.).

4399. Hotelling, H. The teaching of statistics. *Ann. math. Statist.*, 1940, 11, 457-471.—This is a comprehensive discussion of problems involved in the teaching of statistics. The author discusses at length the qualifications of teachers of statistics. He recommends the assignment of responsibility for teaching of and advisement in statistics to a separate, full time department. Another recommendation is the division of students into groups according to mathematical ability, followed by a corresponding division of the elementary statistics course. If possible, all students should master the calculus before undertaking a course in statistics. Elementary courses should begin with the theory of probability, but should go on to the chief distribution functions used in practice, and should include applied problems and work on calculating machines. Discussion by W. E. Denning.—*S. B. Sells* (Brooklyn).

4400. Huffman, J. R. The word-unit method of teaching typewriting. *J. Bus. Educ.*, 1941, 16, 15-16, 30.—(*Educ. Abstr.* VI: 677).

4401. Kelley, T. L., Ruch, G. M., & Terman, L. M. Stanford Achievement Test: Advanced Battery. Yonkers-on-Hudson: World Book, 1940. \$2.00 per 25; \$0.40 per specimen set.—The Advanced Battery (grades 7, 8, and 9) of the revised Stanford Achievement Test includes tests in paragraph meaning, word meaning, language usage, spelling, literature, arithmetic reasoning, arithmetic computation, social studies, and elementary science. There are 5 equivalent forms. The partial battery includes only the tests in reading, arithmetic, language, and spelling.—*M. Keller* (Butler Hospital).

4402. Kelley, T. L., Ruch, G. M., & Terman, L. M. Stanford Achievement Test: Intermediate Battery. Yonkers-on-Hudson: World Book, 1940. \$2.00 per 25; \$0.40 per specimen set.—The Intermediate Battery of the revised Stanford Achievement Test includes tests in paragraph meaning, word meaning, language usage, spelling, literature, arithmetic reasoning, arithmetic computation, social studies, and elementary science for grades 4, 5, and 6. There is also a partial battery at this level which contains only the tests in reading, arithmetic, language, and spelling. 5 forms are available.—*M. Keller* (Butler Hospital).

4403. Kelley, T. L., Ruch, G. M., & Terman, L. M. Stanford Achievement Test: Primary Battery. Yonkers-on-Hudson: World Book, 1940. \$1.10 per 25; \$0.20 per specimen set.—Designed for use with grades 2 and 3 this Primary Battery of the revised Stanford Achievement Test includes tests in paragraph meaning, word meaning, spelling, arith-

metic reasoning, and arithmetic computation. 5 equivalent forms are available. Split-half reliability coefficients (corrected) for each subtest and for total score for grade 3 ranged between 0.857 and 0.968.—*M. Keller* (Butler Hospital).

4404. *Kirkpatrick, E. L. Kirkpatrick chemistry test: Test I, Forms A and B; Test II, Forms A and B.* Emporia, Kan.: Kansas State Teachers College, 1941. Pp. 2 (each form in Test I); 4 (each form in Test II). \$0.60 per 25; \$0.15 per specimen set.—This is an achievement test for first-year high-school chemistry, Test I designed for use at the completion of one semester's work, Test II for use at the completion of the first year's work. The test covers definitions, formulas, equations, principles, theories, and problems. Test II, Form A, by the split-half method yielded a reliability coefficient of .88, while between scores made on Forms A and B a coefficient of .71 was obtained. Percentile norms based on 1701 student scores reported by 59 schools are presented.—*L. M. McCabe* (Cambridge, Mass.).

4405. *Kniss, F. R. Kniss world knowledge test: Forms A and B, for high school students.* Yonkers, N. Y.: World Book, 1940. Pp. 8 (each form). \$1.30 per 25; \$0.20 per specimen set.—There are 6 topical divisions in this test: factual knowledge, time relationships, contributions of the past, cause and effect, tying past and present together, and problems of life. Validity is discussed. The interform reliability coefficient of the total score based on 150 cases is .90; the corrected split-half coefficient based on 244 cases is .95. Norms are based on 1100 cases from 16 schools in 10 states.—*L. M. McCabe* (Cambridge, Mass.).

4406. *Lefever, D. W., Turrell, A. M., & Weitzel, H. I. Principles and techniques of guidance.* New York: Ronald Press, 1941. Pp. vii + 522. \$3.00.—This volume is designed to meet the needs of cadet teachers preparing for classroom work, experienced instructors, counselors-in-training, counselors-in-service, and members of administrative and supervisory groups. The material covered in 17 chapters, each of which concludes with a series of questions and problems and selected references, is written also for social workers, probation officers, and workers in employment and placement agencies. Part I deals with viewpoints in guidance. Part II is concerned with personnel as it affects the teacher's role and that of the specialist in guidance. In Part III the authors discuss plans dealing with the curriculum and the guidance program with a survey of representative guidance practices in 10 selected schools. In Part IV the following topics are discussed: the place and value of records, individual counseling, the group approach to guidance, special guidance problems, the clinical approach, placement, and follow-up procedures. 3 appendices present questionnaires for a growth-needs study, a counselor-activities study, and for admission to technology training.—*P. S. de Q. Cabot* (Simmons).

4407. *McKinney, F. Psychology of personal adjustment.* New York; London: Wiley; Chapman

& Hall, 1941. Pp. xi + 636. \$2.75.—This book meets the "need for a basic psychological text which frankly attacks the problems of the student that are most vital to his personal adjustment. It is not a text in General Psychology." It may be used in a pre-psychology course or to supplement an objective course. There are 16 chapters that may be read in any order and an appendix of 43 pages which includes detachable blanks for a pre-interview rating scale, a rating and test score, and a personal improvement sheet. Names of more than 580 authors and approximately 3700 topics occur in the Index. The latter range from budgeting time and money, to career planning in college, and to successful marriage. There are 56 topics that relate to friendship and marriage and 50 pages on emotional stability and depression and emergence therefrom. 23 specific suggestions illustrate a program leading to maturity, and 16 precepts are offered for developing and maintaining mental health: happiness, motivation, unity, balance, and orientation in the real world. Illustrative case histories, supplemental readings, and references abound throughout the volume, as well as practical directions to the student for self-analysis and self-direction.—*R. H. Gault* (Northwestern).

4408. *Monroe, W. S. [Ed.] Encyclopedia of educational research. A critical inventory of the accomplishments of research.* New York: Macmillan, 1941. Pp. xx + 1344. \$10.00.—(*Educ. Abstr.* VI: 525).

4409. *Mordy, F. E., & Schrammel, H. E. American government test: Form A.* Emporia, Kan.: Kansas State Teachers College, 1940. Pp. 4. \$0.50 per 25; \$0.15 per specimen set.—124 items are presented for use as an achievement test in high school or college. Reliability is approximately .87. Distribution of scores and percentile scores are given for 1456 students in 49 high schools.—*L. M. McCabe* (Cambridge, Mass.).

4410. *Mordy, F. E., & Schrammel, H. E. Constitution test: Form A.* Emporia, Kan.: Kansas State Teachers College, 1940. Pp. 4. \$0.50 per 25; \$0.15 per specimen set.—This test contains 125 items for use as an achievement test in high school and college. Reliability is approximately .88. Distribution of scores and percentile norms are tabulated for 3277 students in 126 high schools. A suggested translation of scores into school marks is also given.—*L. M. McCabe* (Cambridge, Mass.).

4411. *Morrison, R. L., & Vernon, P. E. A new method of marking English compositions.* *Brit. J. educ. Psychol.*, 1941, 11, 109-119.—This study is an experimental evaluation of the Steel and Talman (ST) objective method of marking English compositions based upon the awarding of specific penalties and credits for word usage, sentence structure, and sentence linkage as compared with the conventional impressionistic and vaguely analytic (IA) method emphasizing both expression and subject matter. 2 sets of compositions by pupils aged 11-12 were marked by both methods, matched teams of 5 examiners being employed to obviate any influence

of the one procedure upon the other. Distributions of ST marks revealed greater dispersion, but they were no less skewed than IA distributions. The alleged greater objectivity of the ST method was not demonstrated by an appreciably smaller variability of the ST grades. Variance ratios showed less random error in the ST marks and better agreement among examiners, the latter inference being further substantiated by the average intercorrelations. The apparent greater validity of IA marks in terms of agreement with marks previously assigned by 271 teachers is dubious, since ST estimates purposely omit certain aspects of essay-writing ability.—*R. C. Strassburger* (St. Joseph's College for Women).

4412. Murray, E. Speech personality and social change. *J. higher Educ.*, 12, 1941, 185-190.—Arguing that social misunderstanding is due largely to immaturity and maladjustment of speech personality, the author gives emphasis to the importance of speech development in college education. Speech maladjustment due to inherent or congenital immaturity is heightened in competition. "The chief damage to speech personality which the influence of competition has is to make the speaker incompetent to cooperate genuinely, and hence unable to contribute to the social order in which he lives." The direction of speech education in a democracy is towards mental objectivity. "Mental objectivity is the basis for adjustability, flexibility, productivity, creativity, and increasing life as opposed to egocentricity which is the basis for rigidity, inflexibility, mediocrity, and decreasing life in human contacts and enterprises." To make his contribution under this broad point of view the "speech teacher of the future should be a technician of human relationships and a social engineer." In working with "some of the keys to social change" an "integration philosophy . . . will do much to improve this social change."—*R. A. Brotemarkle* (Pennsylvania).

4413. Rasmussen, O. M., & Peterson, O. J. Rasmussen trigonometry test: Forms A and B. Emporia, Kan.: Kansas State Teachers College, 1940. Pp. 2 (each form). \$0.50 per 25; \$0.15 per specimen set.—This is an achievement test covering the subject matter commonly presented by a number of textbooks in the field of plane trigonometry. It is designed to test the factual material with objective test items and does not attempt to cover computational trigonometry. There are 100 items in the test. A coefficient of reliability of $.87 \pm .02$ was obtained for a group of high-school students by the odd-even method on Form A. For a college class Form A yielded an r of $.90 \pm .02$, and Form B yielded $.93 \pm .02$ by the same method. Percentile norms were computed from 472 high-school students' scores and 67 college students' scores. A suggested translation into school marks is offered.—*L. M. McCabe* (Cambridge, Mass.).

4414. Riker, B. L., & Gaudet, F. J. The use of some tests in the prediction of legal aptitude. *J. appl. Psychol.*, 1941, 25, 313-322.—The Ferson-Stoddard Law Aptitude Examination, the Dearborn

group test, the Otis self-administering test, and the Inglis test of English vocabulary were administered to 180 law students, and the scores were correlated with grades in law courses. The highest validity coefficient, .34, was found with the Ferson-Stoddard test. A survey of the literature relative to this latter test is given.—*E. E. Ghiselli* (California).

4415. Sarbin, T. R., & Bordin, E. S. New criteria for old. *Educ. psychol. Measmt.*, 1941, 1, 173-186.—"If all the literature on the prediction of college grades were to be assembled in one place, the outstanding characteristic would be the almost universal agreement that correlation coefficients higher than .70 are practically impossible with existing methods." This is due to the fact that the honor-point ratio is used as a criterion which suffers from unreliability and heterogeneity. Desirable features of a predictive index are homogeneity, reliability, and relevancy for the educational objectives to be measured. A more predictive instrument than grades is the Sophomore Culture Test which was applied to a group of male and female students entering the arts college of the University of Minnesota in 1934.—*P. S. de Q. Cabot* (Simmons).

4416. Schneider, G. G. Grade and age norms for the Minnesota Vocational Test for Clerical Workers. *Educ. psychol. Measmt.*, 1941, 1, 143-156.—Tables of condensed grade norms for decile points for girls and boys separately in grades 8 through 12, as well as age norms for Tests I and II, are given.—*P. S. de Q. Cabot* (Simmons).

4417. Schrammel, H. E., Rasmussen, O. M., Huebert, A., & Tate, D. J. Kansas vocabulary test: Forms A and B. Emporia, Kan.: Kansas State Teachers College, 1940. Pp. 2 (each form). \$0.40 per 25; \$0.15 per specimen set.—This test calls for multiple-choice responses to 85 words, each used in a very brief phrase or sentence. Its purpose is to test the vocabulary efficiency of elementary-school pupils (grades 4-8). Reliability coefficients average .90. Percentile norms, based on 6,865 pupil scores, are presented as well as a suggested translation of scores into school marks.—*L. M. McCabe* (Cambridge, Mass.).

4418. Shores, L., & Moore, J. E. Peabody Library Information Test: college level, Form A (rev.); high school level, Form A; elementary level, Form A. Minneapolis: Educational Test Bureau, 1940. Pp. 12; 7; 6. College level, \$1.00 per 25; high school level, \$0.75 per 25; elementary level, \$0.60 per 25.—The college level test covers the following: the book, arrangement of books, card catalog, dictionary, encyclopedia, periodicals and indexes, special reference books, and bibliography. Split-half correlation, corrected by the Spearman-Brown formula, is $.88 \pm .02$. Percentile scores are based on 1379 cases, representing 10 colleges. The high school test includes 17 multiple-part questions covering topics similar to those listed above. Its reliability is $.92 \pm .01$. Decile scores based on 769 cases from 6 high schools are given. The elementary test contains 20 multiple-part questions. Reliability is

.91 \pm .01. Decile scores are based on 911 cases from 5 schools.—*L. M. McCabe* (Cambridge, Mass.).

4419. Stewart, M. L. Sentence lengths in reading. *Elem. Sch. J.*, 1940, 41, 130-133.—A study of 7 series of readers showed wide variations in sentence lengths, both for beginning reading and middle grade material. Sentence lengths are increased for the higher grades, but the steps are different in the various books.—*S. S. Sargent* (Barnard).

4420. Stopher, E. C. The freshman testing program. *J. higher Educ.*, 1941, 12, 159-162.—This is a brief study of the battery of tests given freshmen of Ashland College during 1939. The tests include the Ohio State University psychological test; the American Council psychological test; 3 American cooperative general achievement tests (social studies, natural sciences, and mathematics); the cooperative general culture test; the cooperative English test; and the Iowa silent reading advanced test. The study is based on 65-110 students. The general achievement tests give better correlations with science and mathematics grades, and the Ohio State test correlates highly with English grades. The correlations between the Ohio State and the American Council and the vocabulary or verbal sections of the 2 tests make it difficult to decide which of the 2 tests is the best measure of intelligence. The Ohio State test has low positive correlation with mathematics grades, the *Q*-score of the American Council test has a low negative correlation.—*R. A. Brotemarkle* (Pennsylvania).

4421. Stult, D. B., & Lapp, C. J. Some factors in physics achievement at the college level. *J. exp. Educ.*, 1941, 9, 251-253.—Ability in mathematics appears to be more closely related to achievement in college physics than any other factor. While it cannot be regarded as an elemental component of physics aptitude, it appears to be operationally important. The spatial relations factor as measured by the Minnesota Paper Form Board and understanding of mechanical movements as measured by the Thurstone Primary Mental Abilities Tests do not bear a close relationship to success in college physics. The Iowa Physics Aptitude Test and the Iowa Mathematics Aptitude Test predict success in college physics with a fairly high degree of accuracy.—*H. W. Karn* (Pittsburgh).

4422. Tate, D. J., & Buzzard, G. A. Tate economic geography test: Forms A and B. Emporia, Kan.: Kansas State Teachers College, 1940. Pp. 4 (each form). \$0.50 per 25; \$0.15 per specimen set.—This test contains 150 items covering basic material in high-school and elementary college courses. Reliability is approximately .90. Distribution of scores made by 259 students in 17 high schools is given as well as percentile norms.—*L. M. McCabe* (Cambridge, Mass.).

4423. Thralls, Z., Miller, G. J., & Uttley, M. National Council of Geography Teachers geography test: Form A, for grade 4. Bloomington, Ill.: McKnight & McKnight, 1940. Pp. 8. \$1.75 per 25; \$5.00 per 100.—This test "was constructed to

measure geographic understandings and their component associations and relationships—the pupil's 'geographic-mindedness.' Rather than testing purely for retention of facts, the test is primarily concerned with the use of facts." Yes-no and multiple-choice questions are presented in connection with a brief paragraph, a map, or a picture. Reliability as determined by the split-half method was .95 ($N = 327$).—*L. M. McCabe* (Cambridge, Mass.).

4424. Trusler, V. T., Arnett, C. E., Jr., & Schrammel, H. E. Health knowledge test: Forms A and B. Emporia, Kan.: Kansas State Teachers College, 1940. Pp. 4 (each form). \$0.50 per 25; \$0.15 per specimen set.—This test contains 144 items aiming to measure high-school and college students' knowledge of "basic facts and principles of healthful living." The correlation between scores on Forms A and B for 549 college students was .86 \pm .005. Distribution of scores by grades and percentile grade norms based on scores made by 1843 students in high school and the first 2 years in college are presented.—*L. M. McCabe* (Cambridge, Mass.).

4425. Tyler, R. W. Contribution of tests to research in the field of student personnel work. *Educ. psychol. Measmt.*, 1941, 1, 133-142.—Major research areas for testing in a student personnel program are: (1) the formulation of clearly desirable goals, although this is made difficult by the complexity of human development, by the required degree of articulation of student personnel work with the major educational objectives of the college, and by the necessity for research in the field of values; (2) the testing of the fundamental bases of a student personnel program with reference to principles of organization, administration, staff selection, and faculty training; (3) the construction and validation of testing instruments to facilitate the testing program. The wide recognition of a broad definition of tests makes possible an increasing contribution of a testing program in this type of personnel work.—*P. S. de Q. Cabot* (Simmons).

4426. Wang, C. K. A. An annotated bibliography of mental tests and scales. Vol. II. Peiping: Catholic University Press, 1940. Pp. viii + 698. \$5.00.—Volume II adds 1799 test items to the 1776 previously listed (see XIV: 3789). It is entitled *Measurement of educational achievement* and covers the following fields: composite tests and test batteries, arithmetic, English, fine arts, foreign languages, handwriting, health, home economics, mathematics, science, psychology and education, reading, social science, and spelling. The references, all of which are in the English language, include title, author, date, publisher, price, and a brief description of the material. Supplementary sections include addenda, a directory of publishers, and author and subject indexes.—*A. B. Hunter* (Brown).

4427. Williamson, E. G., & Bordin, E. S. A statistical evaluation of clinical counselling. *Educ. psychol. Measmt.*, 1941, 1, 117-132.—This is a summary report of an experiment designed to evaluate the type of counselling based on the

philosophy and procedures at the Testing Bureau of the University of Minnesota. The evaluation was made of cases carefully defined and controlled, by judges not involved in counselling. General conclusions were: (1) Counselling was effective in improving the adjustment of over 80% of the students. (2) Cooperation with the counsellor was positively related to adjustment. (3) Students whose problems were primarily educational and vocational were more successfully counselled than those whose problems were social, personal, or emotional. (4) High-school or previous college achievement is positively related to the degree of cooperation and adjustment.—*P. S. de Q. Cabot* (Simmons).

4428. Worthy, H. D. Science materials and activities important in remedial reading. *Sch. Sci. Math.*, 1941, 41, 507-512.—One of the causes of reading disabilities is a lack of interest on the part of the child. Reading failure develops a negative attitude toward reading and handicaps remedial programs. Science materials are well suited to arousing and maintaining interest in subject matter, which is necessary for a successful remedial reading program. Materials of unusual nature and appeal are indicated.—*G. S. Speer* (Central YMCA College).

4429. Zulliger, H. Psychoanalytic experiences in public school practice. (Trans. by G. V. Swackhammer.) *Amer. J. Orthopsychiat.*, 1941, 11, 356-371.—This is the final installment (see XV: 1536; 2828) of case illustrations of the application of psychoanalytic insights to pedagogical practice.—*R. E. Perl* (Jewish Board of Guardians).

[See also abstracts 4101, 4130, 4431, 4457, 4464, 4470.]

MENTAL TESTS

4430. Babcock, H., & Levy, L. Test and manual of directions; the revised examination for the measurement of efficiency of mental functioning. Chicago: Stoelting, 1940. Pp. 41. \$11.20 per set of test material; \$2.30 per 25 record blanks.—"The present battery of tests is offered as an instrument which permits greater exactness in the measurement of those aspects of mental functioning that have been found to be crucial in the maintenance of stability in our present social environment." The battery is made up of 31 tests grouped as follows: easy tests (personal questions, naming days, etc.), learning, repetition, motor 5 (substitution, writing from dictation, etc.), motor 4 (tracing 2 crosses, writing e's and n's), initial learning, easy continuous level (substitution, counting by 3 from 64 to 1, etc.), and verbal level (opposites, sentence completion, and vocabulary). Discussion of results is based on the records of 1676 normal and 1235 abnormal cases. Norms are based on the results from 1435 cases, ranging in age from 7 to 24 years. The reliability of the battery by the split-half method is .83 when all cases are of the same CA and vocabulary scores are average; it is .92 when vocabularies range from 11 to 20 years.—*L. M. McCabe* (Cambridge, Mass.).

4431. Bruce, L. A study of the CAVD intelligence scale and its results on the doctor's level at Colorado State College of Education. *J. exp. Educ.*, 1941, 9, 216-218.—The CAVD intelligence scale (levels M-Q) is a discriminating instrument for determining the range of abilities of graduate students on the doctor's level. It is sufficiently discriminating to make it virtually certain that students who score above the 75th percentile will make higher marks than those who score below the 25th percentile. Substantial relationships were found between the CAVD and the Cooperative English Usage Test and between the CAVD and the Cooperative Spelling Test. Results of the intercorrelations of the 4 divisions of the CAVD indicate that the language tests measure traits different from those measured by the arithmetic test. The divisions of the CAVD do not overlap to any appreciable extent.—*H. W. Karn* (Pittsburgh).

4432. Crooks, W. R., & Ferguson, L. W. Item validities of the Otis Self-Administering Tests of Mental Ability for a college population. *J. exp. Educ.*, 1941, 9, 229-232.—The analysis presented shows that the validity and difficulty of the items of the Otis test are lower for a college group than for an adult population.—*H. W. Karn* (Pittsburgh).

4433. Greene, E. G. Measurements of human behavior. New York: Odyssey Press, 1941. Pp. xxi + 777. \$3.50.—Illustrated with examples of many tests, this is a "response to the desire of teachers for a text which will present a more comprehensive treatment of behavioral measurement techniques and procedures than is available in any single volume hitherto published. . . . All the important types of tests and appraisals [are discussed, including] appraisals of artistic ability, interests, and attitudes." Part I deals with basic considerations in measurement; Part II, with typical measuring instruments and their uses. Part III, persistent problems, includes: effects of practice on test scores, measurement of growth and senescence, standard deviation or absolute scaling, the evaluation of judgments, and measurement of native differences. There is a combined glossary and subject index and a bibliography which serves as an author index.—*A. Thomsen* (Elmo Roper, Market Research).

4434. Munson, G., & Saffir, M. A. A comparative study of retest ratings on the original and revised Stanford-Binet intelligence scales. *Amer. J. ment. Def.*, 1941, 45, 565-571.—Retests on the 1916 Stanford-Binet of 574 school problem children with IQ's between 50 and 100 are compared with those of a similar group of 1010 children retested on form L of the revised scale. Retest intervals averaged about 3 years; average variation between IQ's on both tests was about 7 points. Both groups showed drops in IQ, these drops averaging 2 points with the revised scale and 3.5 points with the original scale. The Terman-Merrill adjustment of CA's over 13 accounted for roughly one-third of the difference in average drop between the 2 groups. Retests on the revised scale showed no tendency for

the drop in IQ to be related to IQ magnitude and only a slight tendency for the drop to be related to time interval between tests. Results indicate greater stability of IQ's obtained on the revised scale.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

4435. Sullivan, E. T., Clark, W. W., & Tiegs, E. W. *California capacity questionnaire: Forms A and B. Grades 7 to adult*. Los Angeles: California Test Bureau, 1941. Pp. 8 (each form). \$0.75 per 25; \$0.25 per specimen set.—This questionnaire "has been devised in response to a demand for a short, easily administered, dependable measure of capacity, intelligence, or mental alertness." It not only yields an IQ and an MA, but also provides separate IQ's and MA's for verbal and non-verbal capacity. It samples perceptual ability, memory, spatial orientation ability, mathematical reasoning, logical reasoning and inference, and concepts. Reliability by the split-half method, corrected by the Spearman-Brown formula, is .925 for total mental factors, .900 for language tests, and .703 for non-language tests; SD is 30 months ($N = 320$). The correlation between scores on this test and those on the Short-Form California Test of Mental Maturity is .835 ($N = 121$); that between scores on this test and those on the Kuhlmann-Anderson test .821 ($N = 129$). Special suggestions for interpretation of results for business, schools, and research are given. Norms are based on more than 100 school surveys and 48,000 individual measurements.—*L. M. McCabe* (Cambridge, Mass.).

4436. Wechsler, D., Israel, H., & Balinsky, B. *A study of the sub-tests of the Bellevue Intelligence Scale in borderline and mental defective cases*. *Amer. J. ment. Def.*, 1941, 45, 555-558.—Comparing the subtest scores of 82 borderline and 45 mentally defective subjects shows that all but 2 subtests (digit span and object assembly) discriminate effectively between the 2 groups. The block design and similarities tests discriminate most effectively. Both groups were found to do less well on verbal than on performance tests; from ages 10 to 19 the performance tests discriminate better.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

[See also abstracts 4222, 4328.]

CHILDHOOD AND ADOLESCENCE

4437. Anderson, H. H. *Measuring democratic and undemocratic behavior*. *Childh. Educ.*, 1941, 17, 350-353.—(*Educ. Abstr.* VI: 680).

4438. [Anon.] *Child guidance*. *Lancet*, 1940, 238, 287.—This is a special article describing briefly the history of child guidance in England since the establishment of the Child Guidance Council in 1927 and the London Child Guidance Clinic in 1929. The clinic was closed immediately when war was declared.—*C. K. Trueblood* (Cambridge, Mass.).

4439. Barker, R., Dembo, T., & Lewin, K. *Frustration and regression: an experiment with young children*. *Univ. Ia Stud. Child Welf.*, 1941,

18, No. 1. Pp. xv + 314.—30 children 2-5 years of age were observed while playing with toys in a free play situation and in a frustration situation. A 7-point constructiveness-of-play scale was developed. Constructiveness scores in the free play situation correlated with mental age .73 and with chronological age .79; with the omission of 4 subjects the correlations became .81 and .81. Constructiveness scores decreased from the free play to the frustration situation on the average equivalent to 17.3 months mental age. The proportion of time spent in barrier and escape behavior was used as a measure of the strength of the frustration; children showing strong frustration showed greater reduction in constructiveness of play. Regression in the experiment can be linked to any one or all of the following factors: differentiation and disorganization due to emotional tension or due to the person being in an overlapping situation, decrease in security, and a correlated decrease in the extent of time perspective.—*B. Wellman* (Iowa).

4440. Baruch, D. W. *Aggression during doll play in a preschool*. *Amer. J. Orthopsychiat.*, 1941, 11, 252-260.—46 nursery school children from 2 to 5 years of age were given 15 minutes of play with dolls representing their own families. 32 of the 46 expressed aggression in one or more of these ways: separating a single member of the family from the others, spanking members of the family, burying them, crushing or twisting them, calling them names, drowning them, or putting fecal matter on them. The material observed during doll play also helped the 32 student teachers by assisting them to achieve new attitudes toward aggression.—*R. E. Perl* (Jewish Board of Guardians).

4441. Berger, M. M. *Make a wish*. *High Points*, 1941, 23, 76-77.—An anonymous expression of wishes was obtained from the members of a 4th term high school group, aged 14-16. All but 4 of the members wished for wealth and happiness; 2 showed criminal tendencies; 2 revealed deep altruistic feeling.—*G. S. Speer* (Central YMCA College).

4442. Blumenfeld, W. *La teoría psicológica de la pubertad*. (The psychological theory of puberty.) *An. Inst. Psicol. Univ. B. Aires*, 1941, 3, 331-375.—Blumenfeld's theory stresses introversion and the social and cultural conflicts of youth which have become prominent only within the past century. These are more important than the direct effects of puberty, and some pubertal characteristics considered as biophysical are really caused by them. The chief conflicts are: the sexual-erotic (leading to the discovery of the inner world); the conflict of generations; and the religious-metaphysical (recrudescence of the 5-year-old's questions). These spheres have certain common characteristics: unrest; tendency to flight; vacillating emotions, preponderantly negative; phantasy; revolt against authority; and introversion, a typical reaction to conflict among the cultured. The solution is usually through developing a higher equilibrium. With increasing

self-confidence, conflicts yield to concrete affairs and creative work, esthetic and human values emerge, and extraversion returns. Pubertal conflicts are part of the price of civilization. By blocking energy and preventing precipitate decisions and waste of powers, they raise the level of personality and potential attainment—unless the dam breaks or is too high.—*M. E. Morse* (Baltimore, Md.).

4443. **Bowley, A. H.** A study of the general development of the preschool child by means of record forms. *Ment. Hlth, Lond.*, 1941, 2, 11-17.

4444. **Boyd, W.** The effects of evacuation on the children. *Brit. J. educ. Psychol.*, 1941, 11, 120-126. —By means of judgments elicited from the parents of groups of evacuated (evacuation period at least 10 weeks) and non-evacuated children in the 10-14 age class, an evaluation of the effects of evacuation upon the personality of these children is possible. Responses were recorded to the 30 items of a personality inventory descriptive of changes in mental outlook and behavior under the headings "better," "worse," and "little change." Expressing the personality changes in terms of the percentage improved in each item minus the percentage deteriorated, it appears that the greatest gains are in those desirable traits that constitute strength of character, while the least effect is evident in the qualities of emotional stability. Among the non-evacuated children there is considerably less change, and several items show an excess of deterioration over improvement. Comparison of the character changes associated with evacuation with those observed in the home group suggests slight divergence from the inferences derived from the evacuation figures alone.—*R. C. Strassburger* (St. Joseph's College for Women).

4445. **Bühler, C.** Play therapy. *Child Study*, 1941, 18, 115-116.

4446. **Burt, C.** The billeting of evacuated children. *Brit. J. educ. Psychol.*, 1941, 11, 85-98.—On the basis of the accumulated experiences of a period of 18 months during which numerous systematic inquiries have been made among evacuated children, an interpretative survey of the conclusions indicated in these studies, together with concrete practical recommendations for insuring successful adjustment is presented. The outstanding inference in which the investigations concur is the unexpected facility of adaptation in general, with little increase in delinquency and nervous disorder traceable to evacuation. Analysis of cases of maladjustment suggests fundamental considerations for forestalling serious disturbances. Among these are knowledge of the peculiarities of the individual children and of the prospective foster parents. The need for differential treatment according to age, sex, temperament, intelligence, and social status is stressed. There are recommendations regarding preparations for the arrival of evacuees, recreational facilities, visits of parents, the availability of psychologically trained social workers, special camps for children unfit for billeting in private houses, and the problem

of incontinence.—*R. C. Strassburger* (St. Joseph's College for Women).

4447. **Burton, A.** The influence of social factors upon the persistence of satiation in school children. *Child Developm.*, 1941, 12, 121-129.—24 nursery school children were allowed to become satiated with the performance of a peg-board task (criterion of satiation was 10 min. of non-resumption), and then a second child was brought in to help finish the task. 34% of the number of pegs which had been inserted before satiation were inserted during the period of social stimulation, and 43% as much time was spent in post-satiation task performance as in the earlier period. It is concluded "that the social stimulation afforded by an associate after satiation acts in the direction of reducing the persistence of satiation," although individual differences were present. The general absence of satiation in the nursery school is attributed to the presence of social stimulation.—*C. N. Cofer* (George Washington).

4448. **Carlson, W. S.** The relation between mental and physical development. *Science*, 1941, 94, 17-18.—The author refers to an article by F. Boas (see XV: 3193) treating of the relation between mental and physical development. From graphs presented in this article correlations of $.68 \pm .08$ (boys) and $.47 \pm .10$ (girls) have been computed between stature deviations and IQ deviations. It is pointed out that these are not in agreement with other correlations between mental and physical measures.—*F. A. Mote, Jr.* (Connecticut).

4449. **Gesell, A.** The genesis of behavior form in fetus and infant; the growth of the mind from the standpoint of developmental morphology. *Proc. Amer. phil. Soc.*, 1941, 84, 471-488.—The author reviews evidence obtained at the Yale Clinic of Child Development to show the morphogenesis of manifest behavior. This evidence indicates that behavioral development follows a regular pattern and is relatively little influenced by experience. "Growing behavior therefore is never random, because it is circumscribed by the attained morphology of the organism as evidenced in its postural sets. The apparent randomness is . . . an active, ordered variability of a growing 'margin'. . . The concept of maturation obliges us to regard conditioning and learning as ancillary rather than primary mechanisms." In a bibliographic note, the author reviews briefly some important works on the developmental aspects of circumnata behavior, as well as the work at the Yale clinic.—*C. N. Cofer* (George Washington).

4450. **Hildreth, G., & Ingram, C. P.** Selected references from the literature of exceptional children. *Elem. Sch. J.*, 1941, 41, 692-707.—This is a continuation, consisting of 100 annotated titles, of the authors' 2 previous annual bibliographies on the same subject. References are classified under subnormal and backward children, behavior and problem cases, juvenile delinquency, the superior and gifted, the blind and partially seeing, crippled

children, the deaf and hard-of-hearing, delicate children, speech defectives, and general references. There are comments on trends in recent literature on mentally exceptional and on physically handicapped children.—S. S. Sargent (Barnard).

4451. Hirschberg, R. Placement of maladjusted children in a controlled environment. *Amer. J. Orthopsychiat.*, 1941, 11, 304-320.—This paper discusses the purpose and goal of institutional placement for maladjusted children. Institutional placement finds its proper place only in cases of social maladjustment; only where the group situation constitutes the basis on which the difficulty arises, will a modified group situation offer the remedy. Detailed principles regarding intake and discharge policy are discussed.—R. E. Perl (Jewish Board of Guardians).

4452. Huschka, M. Psychopathological disorders in the mother. *J. nerv. ment. Dis.*, 1941, 94, 76-83.—"In a group of 488 problem children, 203 of the mothers, or 41.6 per cent, were found to be suffering from psychopathological conditions. Of these mothers, the 30 who were examined or treated in the psychiatric out-patient department suffered primarily from various psychoneurotic disorders. The pathology which they presented was complex, and in each case the mother's pathological state was an essential factor in the problems of the child who had been referred for psychiatric help. These mothers were peculiarly hard to treat because they had the firmly established habit of projecting their difficulties upon their children." It is emphasized that the patterns underlying the symptomatic behavior of these women were distinctly individual and did not readily admit classification into sub-groups with common characteristics.—M. Keller (Butler Hospital).

4453. Irwin, O. C. The profile as a visual device for indicating central tendencies in speech data. *Child Developm.*, 1941, 12, 111-120.—The profile consists in the erection of bar graphs from equidistant points on the x axis; the y axis represents percent of frequency. As used here, the points on the x axis correspond to vowel (or consonant) sounds, and the bar graphs are drawn to a height which corresponds to the percent usage made of the given speech sound. The rest of the paper is devoted to the presentation of data in terms of such profiles. The data include: vowel elements in the crying of newborn infants, profiles for infant boys and girls, change in vowel elements with age, vowel elements used by normal and subnormal children, and comparison of infants and adults with respect to vowel and consonant usage.—C. N. Cofer (George Washington).

4454. Irwin, O. C., & Curry, T. Vowel elements in the crying vocalization of infants under ten days of age. *Child Developm.*, 1941, 12, 99-109.—The crying sounds made on each of 25 respirations by 40 infants from 1 to 10 days of age were independently transcribed in the international phonetic alphabet by 2 observers. A method for determining the re-

liability of the technique is described. The 2 observers were in agreement in an average of 85% of the observations; greater reliability was found when older infants were observed. 4 vowels appeared with appreciable frequency in these cases, and only 1 vowel was used by all the infants. Front vowels were more often uttered than back or middle vowels. There were no sex or age differences in the use of vowels. The data were compared with those for adult vowel usage, and the comparison showed great differences. "It is inferred . . . that the course of development during infancy in the use of vowel sounds is the increasing use of back vowels."—C. N. Cofer (George Washington).

4455. Jersild, A. T., & Meigs, M. F. Nursery school and social behavior. *Childh. Educ.*, 1941, 17, 354-359.—(*Educ. Abstr.* VI: 771).

4456. Jones, H. E., & Bayley, N. The Berkeley growth study. *Child Developm.*, 1941, 12, 167-173.—This is a description of the general program of the Berkeley growth study. There is a description of the subjects, the various categories of data secured, and the methods of data analysis. In a bibliography are listed 39 titles published so far by the staff conducting the study.—C. N. Cofer (George Washington).

4457. Kramer, M. I. Children's interests in magazines and newspapers. II. *Cath. educ. Rev.*, 1941, 39, 348-358.—The author continues the review of studies in this field and concludes that children are doing extensive reading, for the most part under uncontrolled conditions. This has resulted in a taste for adult reading and an enjoyment of sensational and criminal accounts. Since the nature of the child's reading depends largely upon the nature of available material, there is a definite responsibility for those who are training young children.—G. S. Speer (Central YMCA College).

4458. Landreth, C. Factors associated with crying in young children in the nursery school and the home. *Child Developm.*, 1941, 12, 81-97.—Daily records were kept for 8 weeks on 32 children in the nursery school and for 5 weeks on 25 of the children in the home. (Sample record sheets are presented.) "The type of situations in which crying occurred in the nursery school differed from those in the home, the majority of incidents in the school being associated with conflicts with other children, and in the home with the carrying out of health routines and conflicts with the parents. . . . In the nursery school . . . boys were much more frequently associated with other children's crying than girls, the frequency ratio being three to one. There were also indications of conflicts occurring more frequently between close friends, and arising out of a marked difference in age, size, and strength of one member of the group. The type and percentage frequency of response to children crying in the nursery school furnished evidence of a law of diminishing returns operating for those who cried more frequently. In the homes the parents' records revealed that inconsistent and poor methods of

child training were responsible for many of the difficulties that arose."—C. N. Cofer (George Washington).

4459. Levy, D. M. V. *The hostile act.* *Psychol. Rev.*, 1941, 48, 356-361.—Many frustrations do not evoke aggressive response in the sense of discharging hostility against a social object or its surrogate. Examples from animal behavior show that a distinction must be made between physiologic and social types of frustration. An excellent example of the latter is the response of the child to a new baby sibling, being typically aggressive in type but capable of wide modification. A review of the patterns of 100 experiments on children from 2 to 13 years of age shows that the aggressive act is an ongoing social process, a dynamic unit of behavior, with various influences brought to bear upon it in every phase.—A. G. Bills (Cincinnati).

4460. Más de Ayala, I. *Infancia, adolescencia, juventud.* (Childhood, adolescence, youth.) Montevideo: Monteverde, 1940. Pp. 222.—[Abstracted review; original not seen.] This book, written by a psychiatrist, stresses the educational and psychotherapeutic aspects and will be useful not only to psychiatrists, but also to general practitioners, teachers, and parents. The treatment is inspired by the works of Charlotte Bühler, Stanley Hall, and Spranger.—M. E. Morse (Baltimore, Md.).

4461. McCay, J. B., & Fowler, M. B. *Some sex differences observed in a group of nursery school children.* *Child Develpm.*, 1941, 12, 75-79.—"Sex differences observed in a group of children, 31 girls and 35 boys, enrolled during the years 1932-37 in the nursery school of the New York State College of Home Economics at Cornell have been reported. These differences were small, but in general the males were distinguished from the females by taller, heavier bodies, more food eaten at dinner, particularly the calory foods of breadstuffs and desserts, and more restless movements during the noon-meal. The boys of the group tended to awaken earlier in the morning than did the girls thus shortening their night's sleep and lowering the total amount of sleep gained during 24 hours."—C. N. Cofer (George Washington).

4462. Metheny, E. *Breathing capacity and grip strength of preschool children.* *Univ. Ia Stud. Child Welf.*, 1941, 18, No. 2. Pp. vi + 207.—A dynamometer suited to the size, ability, and interest of preschool children was constructed and the test administered to 202 children. Odd-even reliability correlations of approximately .90 were obtained for the separate age-sex groups. Grip strength of preschool children was found to be no more variable than that of children 6-18 years of age. Boys had greater grip strength than girls at all ages from 3 to 6 years. The relationship to hand used and to various anthropometric measurements was determined. Height was found to have the highest relationship; intelligence, none. Tables for estimating the grip strength from height and age were prepared. Actual grip strength multiplied by 100

and divided by the expected grip strength from these tables was termed the grip quotient. Analyses were made to determine whether grip quotients or breathing capacity quotients served to differentiate degrees of health. The criteria of health used were preschool attendance, health judgments, and fatigue judgments. The findings seemed to justify the suggestion that grip strength as a functional test for preschool children merits further investigation.—B. Wellman (Iowa).

4463. Orgel, S. Z. *Personality distortion and early institutional care.* *Amer. J. Orthopsychiat.*, 1941, 11, 371-374.—This is a discussion of a paper by L. G. Lowrey (see XIV: 5765). The author claims that such personality distortion as Lowrey described occurred in only 2 of the author's 16 cases, and that it would seem to be limited to the individual child rather than to be specific to all children who are exposed to early institutional care and placed in a foster home at the third year without an intermediate placement.—R. E. Perl (Jewish Board of Guardians).

4464. Seipt, I. S. *First international congress for the education of exceptional children.* *Amer. J. ment. Def.*, 1941, 45, 624-627.—A brief résumé is offered of reports dealing with the slow-moving child.—M. W. Kuenzel (Children's Home, Cincinnati, O.).

4465. Suranyi, J. *Die Appetitlosigkeit im Kindesalter.* (Lack of appetite in childhood.) Basel: Karger, 1940. Pp. 128. Frs. 6.—[Abstracted review; original not seen.] Lack of appetite, or absence of the physiological urge to eat, has no connection with hunger, but is a symptom of either somatic or psychic origin. It may signify general vital weakness or gastrointestinal inferiority. Among the psychic causes are a turning of the child against the outer world, phobias, and various environmental factors. The first therapeutic rules are not to force food until appetite returns and to choose it according to the child's taste. The problem is very complex because, as in the adult, the different factors are closely interwoven. Child analysis should be in the hands of the psychiatrist, not the pediatrician.—M. E. Morse (Baltimore, Md.).

4466. Thurstone, T. G. *Primary mental abilities of children.* *Educ. psychol. Measmt.*, 1941, 1, 105-116.—This is a description of an investigation to determine whether primary mental abilities can be isolated at the 14 year age level. 1154 Chicago eighth grade children participated. An analysis of a battery of 60 tests confirmed previous findings of the existence at this age level of 6 factors: verbal comprehension, word fluency, number, space, rote memory, and induction or reasoning. This does not exhaust the possible number of primary factors. A single measure such as an intelligence quotient can be broken down to a profile of linearly independent scores. Further problems in this field are suggested.—P. S. de Q. Cabot (Simmons).

4467. Tryon, C. M. *Studies of individual children who received an exceptional amount of notice from*

their classmates. *Monogr. Soc. Res. Child Developm.*, 1939, 4, No. 4, 85-114.—This supplement to a previous publication of the author (see XIV: 2182) is a limited and confidential edition containing brief sketches of individual children abstracted from the cumulative case records of the Growth Study of Adolescents. It is intended for the reader who wishes to study more intensively the data and interpretations presented in the monograph.—*M. Keller* (Butler Hospital).

4468. *Valentine, C. W.* Editorial note on evacuation investigations. *Brit. J. educ. Psychol.*, 1941, 11, 127.—In view of the conflicting character of certain of the conclusions of the several evacuation investigations, and of the importance of securing data under a variety of conditions, it is urged that further inquiries be carried out. Attention is called to the necessity of noting that the evacuated group submitted to study may be a partially selected one, as those who adjust poorly may have returned home. There is, too, the possibility of varying conceptions as to what constitutes successful adjustment. Care must be taken, also, to isolate the effects of evacuation from the results of war-time conditions in general.—*R. C. Strassburger* (St. Joseph's College for Women).

4469. *Waggoner, R. W., & Boyd, D. A., Jr.* Juvenile aberrant sexual behavior. *Amer. J. Orthopsychiat.*, 1941, 11, 275-292.—Juvenile aberrant sexual practices stand in direct and close relationship to more usual and familiar types of juvenile behavior problems. Frequently they are only another expression of the individual's delinquency pattern and originate from the same general causes as any other type of unacceptable behavior. 25 case histories are given showing the influence or lack of influence of home, church, school, and community. The hope of prevention of adult sexual perversions must depend upon a better mental and sexual hygiene of childhood.—*R. E. Perl* (Jewish Board of Guardians).

4470. *Wasson, R. J.* Measuring primary-grade children's understanding of home and family relationships. *Elem. Sch. J.*, 1940, 41, 108-117.—Individual interviews with 183 children in kindergarten, first, and second grades were made on a number of questions of relationships with parents and siblings, health, obedience, etc. Little difference between responses at the 3 grade levels was found, hence "work on the topic of home and family relationships might be commenced in kindergarten." Within certain limits below-average children under-

stand and are aware of family social relations to as great a degree as average and above-average children.—*S. S. Sargent* (Barnard).

4471. *Watson, M.* Play technique. *J. Pediat.*, 1940, 17, 674-679.—The author discusses play as the child's outlet for feelings which he can not otherwise express. Examples are cited which illustrate the value of play technique in helping children to adjust to various situations.—*E. Green* (Bradley Home).

4472. *Wile, I. S., & Davis, R.* Relation of birth to behavior. *Amer. J. Orthopsychiat.*, 1941, 11, 320-335.—The authors examined the problem of differences in behavior which might be proven the results of instrumental or operative delivery. They studied 500 children from the children's health class at Mt. Sinai Hospital and compared them with 500 children observed in private practice, with the records of 10,000 children delivered in a Bronx hospital, and with the general figures for New York City and for Philadelphia. The children with instrumental birth appeared to show a general reduction of personality energy. A physical trauma factor is evident in the heightened restlessness, poorly controlled hyperactivity, and the contraction of personality forces. "The instrumental factor in birth deserves greater consideration from the standpoint of prophylaxis as well as diagnosis."—*R. E. Perl* (Jewish Board of Guardians).

4473. *Young, F. M.* An analysis of certain variables in a developmental study of language. *Genet. Psychol. Monogr.*, 1941, 23, 3-143.—The language of 74 children aged 30-65 months was studied in the nursery school at the University of Georgia. 20 boys and 17 girls who belonged to the usual economic group attending the nursery school were matched with an equal number of children whose parents were on relief. Records were obtained in 4 different types of environmental settings. For each child 12 verbatim records of 10 minutes each were made in the outdoor setting and 8, 4, and 4 similar records respectively for indoor, dinner, and picture settings. *Jespersen's Essentials of English grammar* was used as a basis of classification. Comparisons on length of response and amounts of verbal behavior showed girls to be superior to boys and regular subjects superior to relief subjects. Length of response increased consistently with age. 92 references.—*F. M. Teagarden* (Pittsburgh).

[See also abstracts 4219, 4223, 4256, 4291, 4324, 4378.]

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